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M E M O R A N D U M

TO: NEC® Code-Making Panel 8

FROM: Sarah Caldwell, *Project Administrator*

DATE: January 30, 2019

SUBJECT: NEC® Second Draft Ballot Final Results (A2019)

According to the final ballot results, all ballot items received the necessary affirmative votes to pass ballot.

- 14 **Members Eligible to Vote**
- 1 **Members Not Returned** (*Offerdahl*)

The attached report shows the number of affirmative, negative, and abstaining votes as well as the explanation of the vote for **each** revision.

To pass ballot, **each** revision requires: (1) a simple majority of those eligible to vote and (2) an affirmative vote of $\frac{2}{3}$ of ballots returned. See Sections 3.3.4.3.(c) and 4.3.10.1 of the ***Regulations Governing the Development of NFPA Standards***.



Second Revision No. 7503-NFPA 70-2018 [Section No. 342.22]

342.22 Number of Conductors.

~~For complete systems, the~~ The number of conductors shall not exceed that permitted by the percentage fill specified in Table 1, Chapter 9.

Cables shall be permitted to be installed where such use is not prohibited by the respective cable articles. The number of cables shall not exceed the allowable percentage fill specified in Table 1, Chapter 9.

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 11:31:36 EDT 2018

Committee Statement

Committee Statement: Table 9, Note 2 addresses 'Cables' therefore CMP-8 removed the references to "For complete systems,"

Response Message: SR-7503-NFPA 70-2018

Public Comment No. 8-NFPA 70-2018 [Section No. 342.22]

Ballot Results

✔ This item has passed ballot

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.

Crider, Joel (Joey)

Hengst, Kenneth W.

Jackson, Pete

Kendall, David H.

Loyd, Richard E.

Martin, Michael C.

Myers, Paul W.

Roe, Rhett A.

West, Rodney J.



Second Revision No. 7504-NFPA 70-2018 [Section No. 344.22]

344.22 Number of Conductors.

~~For complete systems, the~~ The number of conductors shall not exceed that permitted by the percentage fill specified in Table 1, Chapter 9.

Cables shall be permitted to be installed where such use is not prohibited by the respective cable articles. The number of cables shall not exceed the allowable percentage fill specified in Table 1, Chapter 9.

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 11:33:15 EDT 2018

Committee Statement

Committee Statement: Table 9, Note 2 addresses 'Cables' therefore CMP-8 removed the references to "For complete systems,"

Response Message: SR-7504-NFPA 70-2018

[Public Comment No. 11-NFPA 70-2018 \[Section No. 344.22\]](#)

Ballot Results

✔ This item has passed ballot

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.

Crider, Joel (Joey)

Hengst, Kenneth W.

Jackson, Pete

Kendall, David H.

Loyd, Richard E.

Martin, Michael C.

Myers, Paul W.

Roe, Rhett A.

West, Rodney J.



Second Revision No. 7505-NFPA 70-2018 [Section No. 348.22]

348.22 Number of Conductors.

The number of conductors shall not exceed that permitted by the percentage fill specified in Table 1, Chapter 9, or as permitted in Table 348.22, or for metric designator 12 (trade size $\frac{3}{8}$).

Cables shall be permitted to be installed where such use is not prohibited by the respective cable articles. For complete systems, the number of cables shall not exceed the allowable percentage fill specified in Table 1, Chapter 9.

Table 348.22 Maximum Number of Insulated Conductors in Metric Designator 12 (Trade Size $\frac{3}{8}$) Flexible Metal Conduit (FMC)*

Size (AWG)	Types RFH-2, SF-2		Types TF, XHHW, TW		Types TFN, THHN, THWN		Types FEP, FEBP, PF, PGF	
	Fittings Inside Conduit	Fittings Outside Conduit	Fittings Inside Conduit	Fittings Outside Conduit	Fittings Inside Conduit	Fittings Outside Conduit	Fittings Inside Conduit	Fittings Outside Conduit
18	2	3	3	5	5	8	5	8
16	1	2	3	4	4	6	4	6
14	1	2	2	3	3	4	3	4
12	—	—	1	2	2	3	2	3
10	—	—	1	1	1	1	1	2

*In addition, one insulated, covered, or bare equipment grounding conductor of the same size shall be permitted.

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 11:34:00 EDT 2018

Committee Statement

Committee Statement: Table 9, Note 2 addresses 'Cables' therefore CMP-8 removed the references to "For complete systems,"

Response Message: SR-7505-NFPA 70-2018

Public Comment No. 12-NFPA 70-2018 [Section No. 348.22]

Ballot Results

✓ This item has passed ballot

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.

Crider, Joel (Joey)

Hengst, Kenneth W.

Jackson, Pete

Kendall, David H.

Loyd, Richard E.

Martin, Michael C.

Myers, Paul W.

Roe, Rhett A.

West, Rodney J.

**Second Revision No. 7610-NFPA 70-2018 [Section No. 350.10]****350.10 Uses Permitted.**

LFMC shall be permitted to be used in exposed or concealed locations as follows:

- (1) Where conditions of installation, operation, or maintenance require flexibility or protection from machine oils, liquids, vapors, ~~and~~ or solids.
- (2) In hazardous (classified) locations where specifically permitted by Chapter 5.
- (3) For direct burial where listed and marked for the purpose.
- (4) Conductors or cables rated at a temperature higher than the listed temperature rating of LFMC conduit shall be permitted to be installed in LFMC, provided the conductors or cables are not operated at a temperature higher than the listed temperature rating of the LFMC per 110.14(C).

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 17:54:47 EDT 2018

Committee Statement

Committee Statement: This revision replaces “and” with “or”, within a first draft revision, to avoid confusion in the field that “all” substances are required to be present to necessitate the need for protection.

Response Message: SR-7610-NFPA 70-2018

[Public Comment No. 849-NFPA 70-2018 \[Section No. 350.10\]](#)

[Public Comment No. 743-NFPA 70-2018 \[Section No. 350.10\]](#)

Ballot Results

✔ **This item has passed ballot**

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.

Crider, Joel (Joey)

Hengst, Kenneth W.

Jackson, Pete

Kendall, David H.

Loyd, Richard E.

Martin, Michael C.

Myers, Paul W.

Roe, Rhett A.

West, Rodney J.

**Second Revision No. 7506-NFPA 70-2018 [Section No. 350.22(A)]**

(A) Metric Designators 16 through 103 (Trade Sizes ½ through 4).

The number of conductors shall not exceed that permitted by the percentage fill specified in Table 1, Chapter 9.

Cables shall be permitted to be installed where such use is not prohibited by the respective cable articles. ~~For complete systems, the~~ The number of cables shall not exceed the allowable percentage fill specified in Table 1, Chapter 9.

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 11:34:34 EDT 2018

Committee Statement

Committee Statement: Table 9, Note 2 addresses 'Cables' therefore CMP-8 removed the references to "For complete systems,"

Response Message: SR-7506-NFPA 70-2018

Public Comment No. 13-NFPA 70-2018 [Section No. 350.22(A)]

Ballot Results

✔ **This item has passed ballot**

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.

Crider, Joel (Joey)

Hengst, Kenneth W.

Jackson, Pete

Kendall, David H.

Loyd, Richard E.

Martin, Michael C.

Myers, Paul W.

Roe, Rhett A.

West, Rodney J.



Second Revision No. 7507-NFPA 70-2018 [Section No. 352.22]

352.22 Number of Conductors.

The number of conductors shall not exceed that permitted by the percentage fill specified in Table 1, Chapter 9.

Cables shall be permitted to be installed where such use is not prohibited by the respective cable articles. ~~For complete systems, the~~ The number of cables shall not exceed the allowable percentage fill specified in Table 1, Chapter 9.

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 11:35:09 EDT 2018

Committee Statement

Committee Statement: Table 9, Note 2 addresses 'Cables' therefore CMP-8 removed the references to "For complete systems,"

Response Message: SR-7507-NFPA 70-2018

[Public Comment No. 14-NFPA 70-2018 \[Section No. 352.22\]](#)

Ballot Results

✔ This item has passed ballot

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.

Crider, Joel (Joey)

Hengst, Kenneth W.

Jackson, Pete

Kendall, David H.

Loyd, Richard E.

Martin, Michael C.

Myers, Paul W.

Roe, Rhett A.

West, Rodney J.

**Second Revision No. 7508-NFPA 70-2018 [Section No. 353.22]****353.22** Number of Conductors.

The number of conductors shall not exceed that permitted by the percentage fill specified in Table 1, Chapter 9.

Cables shall be permitted to be installed where such use is not prohibited by the respective cable articles. ~~For complete systems, the~~ The number of cables shall not exceed the allowable percentage fill specified in Table 1, Chapter 9.

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 11:35:59 EDT 2018

Committee Statement

Committee Statement: Table 9, Note 2 addresses 'Cables' therefore CMP-8 removed the references to "For complete systems,"

Response Message: SR-7508-NFPA 70-2018

[Public Comment No. 16-NFPA 70-2018 \[Section No. 353.22\]](#)

Ballot Results

✔ **This item has passed ballot**

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.

Crider, Joel (Joey)

Hengst, Kenneth W.

Jackson, Pete

Kendall, David H.

Loyd, Richard E.

Martin, Michael C.

Myers, Paul W.

Roe, Rhett A.

West, Rodney J.



Second Revision No. 7510-NFPA 70-2018 [Section No. 355.22]

355.22 Number of Conductors.

The number of conductors shall not exceed that permitted by the percentage fill specified in Table 1, Chapter 9. Cables shall be permitted to be installed where such use is not prohibited by the respective cable articles. ~~For complete systems, the~~ The number of cables shall not exceed the allowable percentage fill specified in Table 1, Chapter 9.

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 11:36:52 EDT 2018

Committee Statement

Committee Statement: Table 9, Note 2 addresses 'Cables' therefore CMP-8 removed the references to "For complete systems,"

Response Message: SR-7510-NFPA 70-2018

[Public Comment No. 17-NFPA 70-2018 \[Section No. 355.22\]](#)

Ballot Results

✔ This item has passed ballot

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.

Crider, Joel (Joey)

Hengst, Kenneth W.

Jackson, Pete

Kendall, David H.

Loyd, Richard E.

Martin, Michael C.

Myers, Paul W.

Roe, Rhett A.

West, Rodney J.

**Second Revision No. 7613-NFPA 70-2018 [Section No. 356.10]****356.10 Uses Permitted.**

LFNC shall be permitted to be used in exposed or concealed locations for the following purposes:

- (1) Where flexibility is required for installation, operation, or maintenance.
- (2) Where protection of the contained conductors is required from vapors, machine oils, liquids, ~~and~~ or solids.
- (3) For outdoor locations where listed and marked as suitable for the purpose.
- (4) For direct burial where listed and marked for the purpose.
- (5) Type LFNC shall be permitted to be installed in lengths longer than 1.8 m (6 ft) where secured in accordance with 356.30.
- (6) Type LFNC-B as a listed manufactured prewired assembly, metric designator 16 through 27 (trade size ½ through 1) conduit.
- (7) For encasement in concrete where listed for direct burial and installed in compliance with 356.42.
- (8) Conductors or cables rated at a temperature rating of LFNC conduit shall be permitted to be installed in LFNC, provided the conductors or cables are not operated at a temperature higher than the listed temperature rating of the LFNC.

Informational Note: Extreme cold can cause some types of nonmetallic conduits to become brittle and therefore more susceptible to damage from physical contact.

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 17:58:09 EDT 2018

Committee Statement

Committee Statement: This revision replaces “and” with “or”, within a first draft revision, to avoid confusion in the field that “all” substances are required to be present to necessitate the need for protection.

Response Message: SR-7613-NFPA 70-2018

[Public Comment No. 742-NFPA 70-2018 \[Section No. 356.10\]](#)

[Public Comment No. 778-NFPA 70-2018 \[Section No. 356.10\]](#)

Ballot Results

✔ **This item has passed ballot**

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.

Crider, Joel (Joey)

Hengst, Kenneth W.

Jackson, Pete

Kendall, David H.

Loyd, Richard E.

Martin, Michael C.

Myers, Paul W.

Roe, Rhett A.

West, Rodney J.

**Second Revision No. 7511-NFPA 70-2018 [Section No. 356.22]****356.22** Number of Conductors.

The number of conductors shall not exceed that permitted by the percentage fill specified in Table 1, Chapter 9.

Cables shall be permitted to be installed where such use is not prohibited by the respective cable articles. For complete systems, the number of cables shall not exceed the allowable percentage fill specified in Table 1, Chapter 9.

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 11:37:27 EDT 2018

Committee Statement

Committee Statement: Table 9, Note 2 addresses 'Cables' therefore CMP-8 removed the references to "For complete systems,"

Response Message: SR-7511-NFPA 70-2018

[Public Comment No. 18-NFPA 70-2018 \[Section No. 356.22\]](#)

Ballot Results

✔ This item has passed ballot

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.

Crider, Joel (Joey)

Hengst, Kenneth W.

Jackson, Pete

Kendall, David H.

Loyd, Richard E.

Martin, Michael C.

Myers, Paul W.

Roe, Rhett A.

West, Rodney J.

**Second Revision No. 7615-NFPA 70-2018 [Section No. 356.30]****356.30** Securing and Supporting.

Type LFNC shall be securely fastened and supported in accordance with one of the following:

- (1) Where installed in lengths exceeding 1.8 m (6 ft), the conduit shall be securely fastened at intervals not exceeding 900 mm (3 ft) and within 300 mm (12 in.) on each side of every outlet box, junction box, cabinet, or fitting. Where used, cable ties shall be listed ~~as suitable~~ for the application and for securing and supporting.
- (2) Securing or supporting of the conduit shall not be required where it is fished, installed in lengths not exceeding 900 mm (3 ft) at terminals where flexibility is required, or installed in lengths not exceeding 1.8 m (6 ft) from a luminaire terminal connection for tap conductors to luminaires permitted in 410.117(C).
- (3) Horizontal runs of LFNC supported by openings through framing members at intervals not exceeding 900 mm (3 ft) and securely fastened within 300 mm (12 in.) of termination points shall be permitted.
- (4) Securing or supporting of LFNC shall not be required where installed in lengths not exceeding 1.8 m (6 ft) from the last point where the raceway is securely fastened for connections within an accessible ceiling to a luminaire(s) or other equipment. For the purpose of 356.30, listed liquidtight flexible nonmetallic conduit fittings shall be permitted as a means of support.

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 18:00:58 EDT 2018

Committee Statement

Committee Statement: This revision deletes "as suitable" from 356.30 (1) per the Style Manual Section 3.2.1 and Table 3.2.1.

Response Message: SR-7615-NFPA 70-2018

[Public Comment No. 740-NFPA 70-2018 \[Section No. 356.30\]](#)

Ballot Results

✔ **This item has passed ballot**

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.

Crider, Joel (Joey)

Hengst, Kenneth W.

Jackson, Pete

Kendall, David H.

Loyd, Richard E.

Martin, Michael C.

Myers, Paul W.

Roe, Rhett A.

West, Rodney J.



Second Revision No. 7512-NFPA 70-2018 [Section No. 358.22]

358.22 Number of Conductors.

~~For complete systems, the~~ The number of conductors shall not exceed that permitted by the percentage fill specified in Table 1, Chapter 9.

Cables shall be permitted to be installed where such use is not prohibited by the respective cable articles. The number of cables shall not exceed the allowable percentage fill specified in Table 1, Chapter 9.

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 11:37:59 EDT 2018

Committee Statement

Committee Statement: Table 9, Note 2 addresses 'Cables' therefore CMP-8 removed the references to "For complete systems,"

Response Message: SR-7512-NFPA 70-2018

[Public Comment No. 19-NFPA 70-2018 \[Section No. 358.22\]](#)

Ballot Results

✔ This item has passed ballot

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.

Crider, Joel (Joey)

Hengst, Kenneth W.

Jackson, Pete

Kendall, David H.

Loyd, Richard E.

Martin, Michael C.

Myers, Paul W.

Roe, Rhett A.

West, Rodney J.

**Second Revision No. 7513-NFPA 70-2018 [Section No. 360.22(A)]**

(A) FMT — Metric Designators 16 and 21 (Trade Sizes $\frac{1}{2}$ and $\frac{3}{4}$).

The number of conductors in metric designators 16 (trade size $\frac{1}{2}$) and 21 (trade size $\frac{3}{4}$) shall not exceed that permitted by the percentage fill specified in Table 1, Chapter 9.

Cables shall be permitted to be installed where such use is not prohibited by the respective cable articles. ~~For complete systems, the~~ The number of cables shall not exceed the allowable percentage fill specified in Table 1, Chapter 9.

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 11:38:38 EDT 2018

Committee Statement

Committee Statement: Table 9, Note 2 addresses 'Cables' therefore CMP-8 removed the references to "For complete systems,".

Response Message: SR-7513-NFPA 70-2018

[Public Comment No. 20-NFPA 70-2018 \[Section No. 360.22\(A\)\]](#)

Ballot Results

✔ **This item has passed ballot**

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.

Crider, Joel (Joey)

Hengst, Kenneth W.

Jackson, Pete

Kendall, David H.

Loyd, Richard E.

Martin, Michael C.

Myers, Paul W.

Roe, Rhett A.

West, Rodney J.



Second Revision No. 7514-NFPA 70-2018 [Section No. 362.22]

362.22 Number of Conductors.

The number of conductors shall not exceed that permitted by the percentage fill in Table 1, Chapter 9.

Cables shall be permitted to be installed where such use is not prohibited by the respective cable articles. ~~For complete systems, the~~ The number of cables shall not exceed the allowable percentage fill specified in Table 1, Chapter 9.

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 11:39:11 EDT 2018

Committee Statement

Committee Statement: Table 9, Note 2 addresses 'Cables' therefore CMP-8 removed the references to "For complete systems,"

Response Message: SR-7514-NFPA 70-2018

[Public Comment No. 22-NFPA 70-2018 \[Section No. 362.22\]](#)

Ballot Results

✔ This item has passed ballot

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.

Crider, Joel (Joey)

Hengst, Kenneth W.

Jackson, Pete

Kendall, David H.

Loyd, Richard E.

Martin, Michael C.

Myers, Paul W.

Roe, Rhett A.

West, Rodney J.

**Second Revision No. 7618-NFPA 70-2018 [Section No. 362.30(A)]****(A) Securely Fastened.**

ENT shall be securely fastened at intervals not exceeding 900 mm (3 ft). In addition, ENT shall be securely fastened in place within 900 mm (3 ft) of each outlet box, device box, junction box, cabinet, or fitting where it terminates. Where used, cable ties shall be listed ~~as suitable~~ for the application and for securing and supporting.

Exception No. 1: Lengths not exceeding a distance of 1.8 m (6 ft) from a luminaire terminal connection for tap connections to lighting luminaires shall be permitted without being secured.

Exception No. 2: Lengths not exceeding 1.8 m (6 ft) from the last point where the raceway is securely fastened for connections within an accessible ceiling to luminaire(s) or other equipment.

Exception No. 3: For concealed work in finished buildings or prefinished wall panels where such securing is impracticable, unbroken lengths (without coupling) of ENT shall be permitted to be fished.

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 18:03:01 EDT 2018

Committee Statement

Committee Statement: This revision deletes "as suitable" from 362.30(A) per the Style Manual Section 3.2.1 and Table 3.2.1.

Response Message: SR-7618-NFPA 70-2018

[Public Comment No. 741-NFPA 70-2018 \[Section No. 362.30\(A\)\]](#)

Ballot Results

✔ **This item has passed ballot**

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.

Crider, Joel (Joey)

Hengst, Kenneth W.

Jackson, Pete

Kendall, David H.

Loyd, Richard E.

Martin, Michael C.

Myers, Paul W.

Roe, Rhett A.

West, Rodney J.

**Second Revision No. 7593-NFPA 70-2018 [Section No. 366.23]****366.23 Ampacity of Conductors.****(A) Sheet Metal Auxiliary Gutters.**

The adjustment factors in 310.15(B)(3)(a) 310.15(C)(1) shall be applied only where the number of current-carrying conductors, including neutral conductors classified as current-carrying under 310.15(B)(5) 310.15(E), exceeds 30 at any cross section of the sheet metal auxiliary gutter. Conductors for signaling circuits or controller conductors between a motor and its starter and used only for starting duty shall not be considered as current-carrying conductors. The current carried continuously in bare copper bars in sheet metal auxiliary gutters shall not exceed 1.55 amperes/mm² (1000 amperes/in.²) of cross section of the conductor. For aluminum bars, the current carried continuously shall not exceed 1.09 amperes/mm² (700 amperes/in.²) of cross section of the conductor.

(B) Nonmetallic Auxiliary Gutters.

The adjustment factors specified in 310.15(C) ~~(a)~~ 310.15(C)(1) shall be applicable to the current-carrying conductors up to and including the 20 percent fill specified in 366.22(B).

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 16:43:57 EDT 2018

Committee Statement

Committee Statement: This second revision revises this section to correct the references in Article 310. Specifically, 310.15(B)(3)(a) is updated to 310.15(C)(1) and 310.15(B)(5) is updated to 310.15(E).

Response Message: SR-7593-NFPA 70-2018

Public Comment No. 767-NFPA 70-2018 [Section No. 366.23]

Ballot Results

✔ **This item has passed ballot**

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.

Crider, Joel (Joey)

Hengst, Kenneth W.

Jackson, Pete

Kendall, David H.

Loyd, Richard E.

Martin, Michael C.

Myers, Paul W.

Roe, Rhett A.

West, Rodney J.

**Second Revision No. 7604-NFPA 70-2018 [Section No. 370.20(B)]**[See SR-7602](#)**(B) Termination.**

Approved terminating means shall be used for connections to cablebus conductors.

Informational Note No. 1: See 110.14(C) for conductor temperature limitations due to termination provisions for installations up to and including 2000 volts.

Informational Note No. 2: See 110.40 for conductor temperature limitations due to termination provisions for installations 2001 volts to 35,000 volts.

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 17:12:22 EDT 2018

Committee Statement

Committee Statement: This second revision adds two informational notes to 370.20. The informational notes were relocated from "370.80 Ampacity of Conductors" to "370.20 Conductor Size and Termination" for clarity. This second revision changes the location but not the language of the two informational notes.

Response Message: SR-7604-NFPA 70-2018

[Public Comment No. 1556-NFPA 70-2018 \[Section No. 370.20\(B\)\]](#)

Ballot Results

✔ **This item has passed ballot**

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.

Crider, Joel (Joey)

Hengst, Kenneth W.

Jackson, Pete

Kendall, David H.

Loyd, Richard E.

Martin, Michael C.

Myers, Paul W.

Roe, Rhett A.

West, Rodney J.



Second Revision No. 7602-NFPA 70-2018 [Section No. 370.80]

370.80 Ampacity of Conductors.

The ampacity of conductors in cablebus shall be in accordance with ~~Table 310.17 and Table 310.19~~ 310.17 and 310.19 for installations up to and including 2000 volts, or with ~~Table 310.60(C)(69) and Table 310.60(C)(70)~~ Table 311.60(C)(69) and Table 311.60(C)(70) for installations 2001 volts to 35,000 volts.

~~Informational Note No. 1: See 110.14(C) for conductor temperature limitations due to termination provisions for installations up to and including 2000 volts.~~

~~Informational Note No. 2: See 110.40 for conductor temperature limitations due to termination provisions for installations 2001 volts to 35,000 volts.~~

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 17:08:00 EDT 2018

Committee Statement

Committee Statement: This second revision revises this section to correct the references in Articles 310 and 311. Specifically, Table 310.15(B)(17) is updated to 310.17; the new section 310.17 was added to incorporate the requirements once stated in the old table and references to Table 310.17.

Also, Table 310.15(B)(19) is updated to 310.19; the new section 310.19 was added to incorporate the requirements once stated in the old table and references to Table 310.19. Table 310.60(C)(69) is also updated to Table 311.60(C)(69) and Table 310.60(C)(70) is updated to Table 311.60(C)(70).

This second revision removes the two informational notes from “370.80 Ampacity of Conductors”. Both informational notes have been relocated without change to “370.20 Conductor Size and Termination”.

Termination temperature ratings are a critical safety consideration for electrical systems.

Response Message: SR-7602-NFPA 70-2018 Public Comment 1980: Several members of CMP 8 also served on the 370.80 CC Task Group. The language in the new informational notes provide necessary clarity. The voltage levels in the informational notes correlate with the conductors in Cablebus as shown in 310.17 and 310.19 for installations up to and including 2000 volts, or with Table 311.60(C)(69) and Table 311.60(C)(70) for installations over 2000 volts.

[Public Comment No. 771-NFPA 70-2018 \[Section No. 370.80\]](#)

[Public Comment No. 1550-NFPA 70-2018 \[Section No. 370.80\]](#)

[Public Comment No. 1891-NFPA 70-2018 \[Section No. 370.80\]](#)

[Public Comment No. 1980-NFPA 70-2018 \[Section No. 370.80\]](#)

Ballot Results

✔ This item has passed ballot

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.

Crider, Joel (Joey)

Hengst, Kenneth W.

Jackson, Pete

Kendall, David H.

Loyd, Richard E.

Martin, Michael C.

Myers, Paul W.

Roe, Rhett A.

West, Rodney J.

**Second Revision No. 7620-NFPA 70-2018 [Section No. 376.20]****376.20** Conductors Connected in Parallel.

Where single conductor cables comprising each phase, neutral, or grounded conductor of an alternating-current circuit are connected in parallel as permitted in ~~340.10(H)~~ 310.10(G), the conductors shall be installed in groups consisting of not more than one conductor per phase, neutral, or grounded conductor.

Informational Note: The purpose of having all parallel conductor sets within the same group is to prevent current imbalance in the paralleled conductors due to inductive reactance.

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 18:05:40 EDT 2018

Committee Statement

Committee Statement: Per Correlating Committee Note No. 270, this section was revised to correct the references to Article 310. The reference to Section 310.10(H) was corrected to 310.10(G).

Response Message: SR-7620-NFPA 70-2018

Public Comment No. 774-NFPA 70-2018 [Section No. 376.20]

Ballot Results

✔ This item has passed ballot

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.

Crider, Joel (Joey)

Hengst, Kenneth W.

Jackson, Pete

Kendall, David H.

Loyd, Richard E.

Martin, Michael C.

Myers, Paul W.

Roe, Rhett A.

West, Rodney J.

**Second Revision No. 7624-NFPA 70-2018 [Section No. 376.22(B)]****(B) Adjustment Factors.**

The adjustment factors in ~~310.15(C)~~ (a) 310.15(C)(1) shall be applied only where the number of current-carrying conductors, including neutral conductors classified as current-carrying under 310.15(E), exceeds 30 at any cross section of the wireway. Conductors for signaling circuits or controller conductors between a motor and its starter and used only for starting duty shall not be considered as current-carrying conductors.

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 18:08:07 EDT 2018

Committee Statement

Committee Statement: Per Correlating Committee Note No. 270, this section was revised to correct the references to Article 310. The reference to 310.15(B)(3)(a) changed to 310.15(C)(1), not 310.15(C)(a) as stated.

Response Message: SR-7624-NFPA 70-2018

[Public Comment No. 777-NFPA 70-2018 \[Section No. 376.22\(B\)\]](#)

Ballot Results

✔ **This item has passed ballot**

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.

Crider, Joel (Joey)

Hengst, Kenneth W.

Jackson, Pete

Kendall, David H.

Loyd, Richard E.

Martin, Michael C.

Myers, Paul W.

Roe, Rhett A.

West, Rodney J.



Second Revision No. 7625-NFPA 70-2018 [Section No. 378.22]

378.22 Number of Conductors.

The sum of cross-sectional areas of all contained conductors or cables at any cross section of the nonmetallic wireway shall not exceed 20 percent of the interior cross-sectional area of the nonmetallic wireway. Conductors for signaling circuits or controller conductors between a motor and its starter and used only for starting duty shall not be considered as current-carrying conductors.

The adjustment factors specified in 310.15(C) (a) 310.15(C)(1) shall be applicable to the current-carrying conductors up to and including the 20 percent fill specified in the first paragraph of this section.

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 18:08:55 EDT 2018

Committee Statement

Committee Statement: Per Correlating Committee Note No. 270, this section was revised to correct the references to Article 310. The reference to 310.15(B)(3)(a) changed to 310.15(C)(1), not 310.15(C)(a) as stated.

Response Message: SR-7625-NFPA 70-2018

Public Comment No. 780-NFPA 70-2018 [Section No. 378.22]

Ballot Results

✓ This item has passed ballot

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.

Crider, Joel (Joey)

Hengst, Kenneth W.

Jackson, Pete

Kendall, David H.

Loyd, Richard E.

Martin, Michael C.

Myers, Paul W.

Roe, Rhett A.

West, Rodney J.



Second Revision No. 7626-NFPA 70-2018 [Section No. 384.22]

384.22 Number of Conductors.

The number of conductors or cables permitted in strut-type channel raceways shall not exceed the percentage fill using Table 384.22 and applicable cross-sectional area of specific types and sizes of wire given in the tables in Chapter 9.

The adjustment factors of ~~310.15(C)~~ (a) 310.15(C)(1) shall not apply to conductors installed in strut-type channel raceways where all of the following conditions are met:

- (1) The cross-sectional area of the raceway exceeds 2500 mm² (4 in.²).
- (2) The current-carrying conductors do not exceed 30 in number.
- (3) The sum of the cross-sectional areas of all contained conductors does not exceed 20 percent of the interior cross-sectional area of the strut-type channel raceways.

Table 384.22 Channel Size and Inside Cross-Sectional Area

<u>Size Channel</u>	<u>Area</u>		<u>40% Area*</u>		<u>25% Area†</u>	
	<u>in.²</u>	<u>mm²</u>	<u>in.²</u>	<u>mm²</u>	<u>in.²</u>	<u>mm²</u>
1 ⁵ / ₈ × 1 ⁵ / ₁₆	0.887	572	0.355	229	0.222	143
1 ⁵ / ₈ × 1	1.151	743	0.460	297	0.288	186
1 ⁵ / ₈ × 1 ³ / ₈	1.677	1076	0.671	433	0.419	270
1 ⁵ / ₈ × 1 ⁵ / ₈	2.028	1308	0.811	523	0.507	327
1 ⁵ / ₈ × 2 ⁷ / ₁₆	3.169	2045	1.267	817	0.792	511
1 ⁵ / ₈ × 3 ¹ / ₄	4.308	2780	1.723	1112	1.077	695
1 ¹ / ₂ × 3 ³ / ₄	0.849	548	0.340	219	0.212	137
1 ¹ / ₂ × 1 ¹ / ₂	1.828	1179	0.731	472	0.457	295
1 ¹ / ₂ × 1 ⁷ / ₈	2.301	1485	0.920	594	0.575	371
1 ¹ / ₂ × 3	3.854	2487	1.542	995	0.964	622

* Raceways with external joiners shall use a 40 percent wire fill calculation to determine the number of conductors permitted.

† Raceways with internal joiners shall use a 25 percent wire fill calculation to determine the number of conductors permitted.

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 18:09:48 EDT 2018

Committee Statement

Committee Statement: Per Correlating Committee Note No. 270, this section was revised to correct the references to Article 310. The reference to 310.15(B)(3)(a) changed to 310.15(C)(1), not 310.15(C)(a) as stated.

Response Message: SR-7626-NFPA 70-2018

[Public Comment No. 783-NFPA 70-2018 \[Section No. 384.22\]](#)

Ballot Results

✔ **This item has passed ballot**

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.

Crider, Joel (Joey)

Hengst, Kenneth W.

Jackson, Pete

Kendall, David H.

Loyd, Richard E.

Martin, Michael C.

Myers, Paul W.

Roe, Rhett A.

West, Rodney J.

**Second Revision No. 7627-NFPA 70-2018 [Section No. 386.22]****386.22** Number of Conductors or Cables.

The number of conductors or cables installed in surface metal raceway shall not be greater than the number for which the raceway is designed. Cables shall be permitted to be installed where such use is not prohibited by the respective cable articles.

The adjustment factors of ~~310.15(C)~~ (a) 310.15(C)(1) shall not apply to conductors installed in surface metal raceways where all of the following conditions are met:

- (1) The cross-sectional area of the raceway exceeds 2500 mm² (4 in.²).
- (2) The current-carrying conductors do not exceed 30 in number.
- (3) The sum of the cross-sectional areas of all contained conductors does not exceed 20 percent of the interior cross-sectional area of the surface metal raceway.

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 18:10:21 EDT 2018

Committee Statement

Committee Statement: Per Correlating Committee Note No. 270, this section was revised to correct the references to Article 310. The reference to 310.15(B)(3)(a) changed to 310.15(C)(1), not 310.15(C)(a) as stated.

Response Message: SR-7627-NFPA 70-2018

Public Comment No. 785-NFPA 70-2018 [Section No. 386.22]

Ballot Results

✔ **This item has passed ballot**

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.

Crider, Joel (Joey)

Hengst, Kenneth W.

Jackson, Pete

Kendall, David H.

Loyd, Richard E.

Martin, Michael C.

Myers, Paul W.

Roe, Rhett A.

West, Rodney J.

**Second Revision No. 7630-NFPA 70-2018 [Section No. 390.23]****390.23** Ampacity of Conductors.

The ampacity adjustment factors in ~~310.15(B) (3)~~ 310.15(C) shall apply to conductors installed in underfloor raceways.

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 18:14:04 EDT 2018

Committee Statement

Committee Statement: Per Correlating Committee Note No. 270, this section was revised to correct the references to Article 310. The reference to 310.15(B)(3) was corrected to 310.15(C).

Response Message: SR-7630-NFPA 70-2018

[Public Comment No. 787-NFPA 70-2018 \[Section No. 390.23\]](#)

Ballot Results

✓ **This item has passed ballot**

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.

Crider, Joel (Joey)

Hengst, Kenneth W.

Jackson, Pete

Kendall, David H.

Loyd, Richard E.

Martin, Michael C.

Myers, Paul W.

Roe, Rhett A.

West, Rodney J.



Second Revision No. 7535-NFPA 70-2018 [Section No. 392.1]

392.1 Scope.

This article covers cable tray systems, including ladder, ventilated trough, ventilated channel, solid bottom, and other similar structures.

Informational Note: For further information on cable trays, see ANSI/NEMA-VE 1-2017, *Metal Cable Tray Systems*; , and NECA/NEMA 105-2015, *Standard for Installing Metal Cable Tray Systems*; and NEMA-FG 1, *Nonmetallic Cable Tray Systems* .

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 13:10:27 EDT 2018

Committee Statement

Committee Statement: The Revision years were confirmed and updated for NEMA VE-1 and NECA/NEMA 105 per the direction of the Correlating Committee on Note No. 153. NEMA FG-1 was rescinded by NEMA earlier this year and removed from the informational note.

CMP-8 requests that the Correlating Committee assign a Task Group to discuss and act on this subject for the 2023 NEC. Revision years for standards or codes should be optional when referenced in Informational Notes and in Annex A. There are several published standards that have removed revision dates with the understanding that the most current edition should be used. Since Informational Notes and Annex's are only for information and are not enforceable a Code Making Panel should have this option.

The Correlating Committee and Code Making Panel 1 should consider in future editions of the NEC to add the following to 90.5(C): Any code or standard references without a revision date/year appearing in Informational Notes and Annex A of this Code shall be interpreted as referring to the latest edition of that code or standard.

Response Message: SR-7535-NFPA 70-2018

[Public Comment No. 23-NFPA 70-2018 \[Section No. 392.1\]](#)

Ballot Results

✔ This item has passed ballot

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug
Berman, Richard J.
Campbell, David M.
Cogburn, Larry D.
Crider, Joel (Joey)
Hengst, Kenneth W.
Jackson, Pete
Kendall, David H.
Loyd, Richard E.
Martin, Michael C.
Myers, Paul W.
Roe, Rhett A.
West, Rodney J.

**Second Revision No. 7540-NFPA 70-2018 [Section No. 392.30(B)]****(B) Cables and Conductors.**

Cables and conductors shall be secured to and supported by the cable tray system in accordance with (1), (2), (3), and (4) as applicable:

- (1) In other than horizontal runs, the cables shall be fastened securely to transverse members of the cable tray.
- (2) Supports shall be provided to prevent stress on cables where they enter raceways from cable tray systems.
- (3) The system shall provide for the support of cables and raceway wiring methods in accordance with their corresponding articles. Where cable trays support individual conductors or multiconductor cables and where the conductors or multiconductor cables pass from one cable tray to another, or from a cable tray to raceway(s) or from a cable tray to equipment where the conductors are terminated, the distance between the cable trays or between the cable tray and the raceway(s) or the equipment shall not exceed 1.8 m (6 ft). The conductors shall be secured to the cable tray(s) at the transition, and they shall be protected, by guarding or by location, from physical damage.
- (4) Cable ties shall be listed and identified ~~as suitable~~ for the application and for securement and support.

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 13:21:41 EDT 2018

Committee Statement

Committee Statement: Comment 739 is accepted. Section 392.30(B) was revised to delete "as suitable" per the NEC Style Manual Section 3.2.1 and Table 3.2.1.

Response Message: SR-7540-NFPA 70-2018

[Public Comment No. 739-NFPA 70-2018 \[Section No. 392.30\(B\)\]](#)

[Public Comment No. 773-NFPA 70-2018 \[Section No. 392.30\]](#)

Ballot Results

✔ **This item has passed ballot**

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.

Crider, Joel (Joey)

Hengst, Kenneth W.

Jackson, Pete

Kendall, David H.

Loyd, Richard E.

Martin, Michael C.

Myers, Paul W.

Roe, Rhett A.

West, Rodney J.

**Second Revision No. 7543-NFPA 70-2018 [Section No. 392.44]****392.44** Expansion Splice Plates.

~~Cable tray~~ Expansion splice plates for cable trays shall be ~~provided with expansion splice plates provided~~ where necessary to compensate for thermal expansion and contraction.

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 13:28:22 EDT 2018

Committee Statement

Committee Statement: Section 392.44 was revised per the NEC Style Manual Section 3.3.3 for clarity. Section 352.44 was used as a reference for the structure of the sentence.

Response Message: SR-7543-NFPA 70-2018

[Public Comment No. 236-NFPA 70-2018 \[Section No. 392.44\]](#)

[Public Comment No. 918-NFPA 70-2018 \[Section No. 392.30\]](#)

Ballot Results

✔ This item has passed ballot

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.

Crider, Joel (Joey)

Hengst, Kenneth W.

Jackson, Pete

Kendall, David H.

Loyd, Richard E.

Martin, Michael C.

Myers, Paul W.

Roe, Rhett A.

West, Rodney J.

**Second Revision No. 7544-NFPA 70-2018 [Sections 392.46(A), 392.46(B)]****(A) Through Bushed Conduit or Tubing.**

Individual conductors or multiconductor cables with entirely nonmetallic sheaths shall be permitted to enter enclosures where they are terminated through nonflexible bushed conduit or tubing installed for their protection provided they are secured at the point of transition from the cable tray and the conduit or tubing is sealed at the outer end using an approved means so as to prevent debris from entering the equipment through the conduit or tubing.

(B) Flanged Connections.

Individual conductors or multiconductor cables with entirely nonmetallic sheaths shall be permitted to enter enclosures through openings associated with flanges from cable trays where the cable tray is attached to the flange and the flange is mounted directly to the equipment. The openings shall be made such that the conductors are protected from abrasion and the opening shall be sealed or covered to prevent debris from entering the enclosure through the opening.

Informational Note: One method of preventing debris from entering the enclosure is to seal the outer end of the raceway or the opening with duct seal.

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 13:33:55 EDT 2018

Committee Statement

Committee Statement: Section 392.46(A) and (B) was revised to distinguish the wiring methods acceptable for use with "bushed conduit or tubing" and "flanged connections" when entering an enclosure.

Response Message: SR-7544-NFPA 70-2018

Public Comment No. 28-NFPA 70-2018 [Sections 392.46(A), 392.46(B)]

Ballot Results

✔ **This item has passed ballot**

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.
Crider, Joel (Joey)
Hengst, Kenneth W.
Jackson, Pete
Kendall, David H.
Loyd, Richard E.
Martin, Michael C.
Myers, Paul W.
Roe, Rhett A.
West, Rodney J.



Second Revision No. 7546-NFPA 70-2018 [Sections 392.60(A), 392.60(B)]

(A) Metal Cable Trays.

Metal cable trays shall be permitted to be used as equipment grounding conductors where continuous maintenance and supervision ensure that qualified persons service the installed cable tray system and the cable tray complies with this section. Metal cable trays that support electrical conductors shall be grounded as required for conductor enclosures in accordance with 250.96 and Part IV of Article 250. Metal cable trays containing only non-power conductors shall be electrically continuous through approved connections or the use of a bonding jumper.

Informational Note: Examples of non-power conductors include nonconductive optical fiber cables and Class 2 and Class 3 remote-control, signaling, and power-limited circuits.

(B) Steel or Aluminum Cable Tray Systems.

Steel or aluminum cable tray systems shall be permitted to be used as equipment grounding conductors, provided all the following requirements are met:

- (1) The cable tray sections and fittings are identified as an equipment grounding conductor.
- (2) The minimum cross-sectional area of cable trays conform to the requirements in [Table 392.60\(A\)](#) [Table 392.60\(B\)](#) .
- (3) All cable tray sections and fittings are legibly and durably marked to show the cross-sectional area of metal in channel cable trays, or cable trays of one-piece construction, and the total cross-sectional area of both side rails for ladder or trough cable trays.
- (4) Cable tray sections, fittings, and connected raceways are bonded in accordance with 250.96, using bolted mechanical connectors or bonding jumpers sized and installed in accordance with 250.102.

Table 392.60(B) Metal Area Requirements for Cable Trays Used as Equipment Grounding Conductor

<u>Maximum Fuse Ampere Rating, Circuit Breaker Ampere Trip Setting, or Circuit Breaker Protective Relay Ampere Trip Setting for Ground-Fault Protection of Any Cable Circuit in the Cable Tray System</u>	<u>Minimum Cross-Sectional Area of Metal*</u>			
	<u>Steel Cable Trays</u>		<u>Aluminum Cable Trays</u>	
	<u>mm²</u>	<u>in.²</u>	<u>mm²</u>	<u>in.²</u>
60	129	0.20	129	0.20
100	258	0.40	129	0.20
200	451.5	0.70	129	0.20
400	645	1.00	258	0.40
600	967.5	1.50 [†]	258	0.40
1000	—	—	387	0.60
1200	—	—	645	1.00
1600	—	—	967.5	1.50
2000	—	—	1290	2.00 [†]

*Total cross-sectional area of both side rails for ladder or trough cable trays; or the minimum cross-sectional area of metal in channel cable trays or cable trays of one-piece construction.

[†]Steel cable trays shall not be used as equipment grounding conductors for circuits with ground-fault protection above 600 amperes. Aluminum cable trays shall not be used as equipment grounding conductors for circuits with ground-fault protection above 2000 amperes.

Submitter Information Verification

Committee: NEC-P08

Submission Date: Mon Oct 22 13:38:29 EDT 2018

Committee Statement

Committee Statement: To address the Correlating Committee Comment Table 392.60(A) was revised to Table 392.60(B) and the reference to Table 392.60(A) in 392.60(B)(2) was revised to Table 392.60(B). The CC Comment has nothing to do with First Revision 7966 however it can be treated as editorial by CMP-8 by direction of the Correlating Committee.

Response Message: SR-7546-NFPA 70-2018

[Public Comment No. 238-NFPA 70-2018 \[Sections 392.60\(A\), 392.60\(B\)\]](#)

[Public Comment No. 920-NFPA 70-2018 \[Section No. 392.60\(A\)\]](#)

Ballot Results

✔ This item has passed ballot

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.

Crider, Joel (Joey)

Hengst, Kenneth W.

Jackson, Pete

Kendall, David H.

Loyd, Richard E.

Martin, Michael C.

Myers, Paul W.

Roe, Rhett A.

West, Rodney J.



Second Revision No. 7552-NFPA 70-2018 [Section No. 392.80(A)(1)]

(1) Multiconductor Cables.

The ampacity of multiconductor cables, nominally rated 2000 volts or less, installed according to the requirements of 392.22(A) shall be as given in Table 310.16 and Table 310.18, subject to 392.80(A)(1)(a), (A)(1)(b), (A)(1)(c), and 310.14(A)(2).

(a) The adjustment factors of 310.15(C)(1)(a) shall apply only to multiconductor cables with more than three current-carrying conductors. Adjustment factors shall be limited to the number of current-carrying conductors in the cable and not to the number of conductors in the cable tray.

(b) Where cable trays are continuously covered for more than 1.8 m (6 ft) with solid unventilated covers, not over 95 percent of the ampacities of Table 310.16 and Table 310.18 shall be permitted for multiconductor cables.

(c) Where multiconductor cables are installed in a single layer in uncovered trays, with a maintained spacing of not less than one cable diameter between cables, the ampacity shall not exceed the ambient temperature-corrected ampacities of multiconductor cables, with not more than three insulated conductors rated 0 through 2000 volts in free air, in accordance with 310.14(B).

Informational Note: See [Informative Annex B](#), Table B.310.15(B)(2)(3).

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 13:48:27 EDT 2018

Committee Statement

Committee Statement: Per Correlating Committee Comment 2213 and Note No. 270, this section was revised to correct the references to Article 310.

310.15(C)(1)(a) to 310.15(C)(1)

Added "Informative Annex B" to the informational note for clarification.

CMP-8 reviewed all references to Article 310 and New Article 311 and revised the referenced sections within the articles under CMP-8's purview. Also refer to SR 7554.

Response Message: SR-7552-NFPA 70-2018

[Public Comment No. 857-NFPA 70-2018 \[Section No. 392.80\(A\)\(1\)\]](#)

[Public Comment No. 2213-NFPA 70-2018 \[Global Input\]](#)

Ballot Results

✓ This item has passed ballot

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.

Crider, Joel (Joey)

Hengst, Kenneth W.

Jackson, Pete

Kendall, David H.

Loyd, Richard E.

Martin, Michael C.

Myers, Paul W.

Roe, Rhett A.

West, Rodney J.



Second Revision No. 7554-NFPA 70-2018 [Section No. 392.80(A)(2)]

(2) Single-Conductor Cables.

The ampacity of single-conductor cables shall be as permitted by 310.14(A)(2). The adjustment factors of 310.15(C) (a) 310.15(C)(1) shall not apply to the ampacity of cables in cable trays. The ampacity of single-conductor cables, or single conductors cabled together (triplexed, quadruplexed, and so forth), nominally rated 2000 volts or less, shall comply with the following:

(a) Where installed according to the requirements of 392.22(B), the ampacities for 600 kcmil and larger single-conductor cables in uncovered cable trays shall not exceed 75 percent of the ampacities in Table 310.17 and Table 310.19. Where cable trays are continuously covered for more than 1.8 m (6 ft) with solid unventilated covers, the ampacities for 600 kcmil and larger cables shall not exceed 70 percent of the ampacities in Table 310.17 and Table 310.19.

(b) Where installed according to the requirements of 392.22(B), the ampacities for 1/0 AWG through 500 kcmil single-conductor cables in uncovered cable trays shall not exceed 65 percent of the ampacities in Table 310.17 and Table 310.19. Where cable trays are continuously covered for more than 1.8 m (6 ft) with solid unventilated covers, the ampacities for 1/0 AWG through 500 kcmil cables shall not exceed 60 percent of the ampacities in Table 310.17 and Table 310.19.

(c) Where single conductors are installed in a single layer in uncovered cable trays, with a maintained space of not less than one cable diameter between individual conductors, the ampacity of 1/0 AWG and larger cables shall not exceed the ampacities in Table 310.17 and Table 310.19.

Exception to (2)(c): For solid bottom cable trays, the ampacity of single conductor cables shall be determined by 310.14(B).

(d) Where single conductors are installed in a triangular or square configuration in uncovered cable trays, with a maintained free airspace of not less than 2.15 times one conductor diameter ($2.15 \times \text{O.D.}$) of the largest conductor contained within the configuration and adjacent conductor configurations or cables, the ampacity of 1/0 AWG and larger cables shall not exceed the ampacities of two or three single insulated conductors rated 0 through 2000 volts supported on a messenger in accordance with 310.15.

Informational Note: See Table 310.20.

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 13:49:47 EDT 2018

Committee Statement

Committee Statement: Per Correlating Committee Comment 2213 and Note No. 270, this section was revised to correct the references to Article 310.

310.15(C)(a) to 310.15(C)(1)

Exception was revised from (2)(3)(c) to (2)(c). (2)(3)(c) doesn't exist.

Response Message: SR-7554-NFPA 70-2018

[Public Comment No. 859-NFPA 70-2018 \[Section No. 392.80\(A\)\(2\)\]](#)

Ballot Results

✓ This item has passed ballot

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.

Crider, Joel (Joey)

Hengst, Kenneth W.

Jackson, Pete

Kendall, David H.

Loyd, Richard E.

Martin, Michael C.

Myers, Paul W.

Roe, Rhett A.

West, Rodney J.

**Second Revision No. 7558-NFPA 70-2018 [Section No. 392.80(B)(1)]****(1) Multiconductor Cables (2001 Volts or Over).**

The ampacity of multiconductor cables shall be as given in ~~Table 310.60(C)(75)~~ Table 311.60(C)(75) and ~~Table 310.60(C)(76)~~ Table 311.60(C)(76), subject to the following:

- (1) Where cable trays are continuously covered for more than 1.8 m (6 ft) with solid unventilated covers, not more than 95 percent of the ampacities of ~~Table 310.60(C)(75)~~ Table 311.60(C)(75) and ~~Table 310.60(C)(76)~~ Table 311.60(C)(76) shall be permitted for multiconductor cables.
- (2) Where multiconductor cables are installed in a single layer in uncovered cable trays, with maintained spacing of not less than one cable diameter between cables, the ampacity shall not exceed the allowable ampacities of ~~Table 310.60(C)(71)~~ Table 311.60(C)(71) and ~~Table 310.60(C)(72)~~ Table 311.60(C)(72).

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 13:59:24 EDT 2018

Committee Statement

Committee Statement: Per Correlating Committee Comment 2213 and Note No. 270, this section was revised to correct the references to Article 311.

Table 310.60(C)(71) to Table 311.60(C)(71)

Table 310.60(C)(72) to Table 311.60(C)(72)

Table 310.60(C)(75) to Table 311.60(C)(75)

Table 310.60(C)(76) to Table 311.60(C)(76)

Response Message: SR-7558-NFPA 70-2018

Public Comment No. 860-NFPA 70-2018 [Section No. 392.80(B)(1)]

Ballot Results

✔ **This item has passed ballot**

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug
Berman, Richard J.
Campbell, David M.
Cogburn, Larry D.
Crider, Joel (Joey)
Hengst, Kenneth W.
Jackson, Pete
Kendall, David H.
Loyd, Richard E.
Martin, Michael C.
Myers, Paul W.
Roe, Rhett A.
West, Rodney J.



Second Revision No. 7556-NFPA 70-2018 [Section No. 392.80(B)(2)]

(2) Single-Conductor Cables (2001 Volts or Over).

The ampacity of single-conductor cables, or single conductors cabled together (triplexed, quadruplexed, and so forth), shall comply with the following:

- (1) The ampacities for 1/0 AWG and larger single-conductor cables in uncovered cable trays shall not exceed 75 percent of the ~~allowable~~ ampacities in ~~Table 310.60(C)(69)~~ Table 311.60(C)(69) and ~~Table 310.60(C)(70)~~ Table 311.60(C)(70). Where the cable trays are covered for more than 1.8 m (6 ft) with solid unventilated covers, the ampacities for 1/0 AWG and larger single-conductor cables shall not exceed 70 percent of the ampacities in ~~Table 310.60(C)(69)~~ Table 311.60(C)(69) and ~~Table 310.60(C)(70)~~ Table 311.60(C)(70).
- (2) Where single-conductor cables are installed in a single layer in uncovered cable trays, with a maintained space of not less than one cable diameter between individual conductors, the ampacity of 1/0 AWG and larger cables shall not exceed the ampacities in ~~Table 310.60(C)(69)~~ Table 311.60(C)(69) and ~~Table 310.60(C)(70)~~ Table 311.60(C)(70).
- (3) Where single conductors are installed in a triangular or square configuration in uncovered cable trays, with a maintained free air space of not less than 2.15 times the diameter ($2.15 \times \text{O.D.}$) of the largest conductor contained within the configuration and adjacent conductor configurations or cables, the ampacity of 1/0 AWG and larger cables shall not exceed the ampacities in ~~Table 310.60(C)(67)~~ Table 311.60(C)(67) and ~~Table 310.60(C)(68)~~ Table 311.60(C)(68).

Submitter Information Verification

Committee: NEC-P08

Submittal Date: Mon Oct 22 13:52:14 EDT 2018

Committee Statement

Committee Statement: This revision addresses the Correlating Committee Note No. 16 and removed "allowable" from 392.80(B)(2)(1).

Per Correlating Committee Comment 2213 and Note No. 270, this section was revised to correct the references to Article 311.

Table 310.60(C)(67) to Table 311.60(C)(67)

Table 310.60(C)(68) to Table 311.60(C)(68)

Table 310.60(C)(69) to Table 311.60(C)(69)

Table 310.60(C)(70) to Table 311.60(C)(70)

Response Message: SR-7556-NFPA 70-2018

[Public Comment No. 861-NFPA 70-2018 \[Section No. 392.80\(B\)\(2\)\]](#)

[Public Comment No. 921-NFPA 70-2018 \[Section No. 392.80\(B\)\]](#)

[Public Comment No. 241-NFPA 70-2018 \[Section No. 392.80\(B\)\(2\)\]](#)

Ballot Results

✓ This item has passed ballot

14 Eligible Voters

1 Not Returned
13 Affirmative All
0 Affirmative with Comments
0 Negative with Comments
0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug
Berman, Richard J.
Campbell, David M.
Cogburn, Larry D.
Crider, Joel (Joey)
Hengst, Kenneth W.
Jackson, Pete
Kendall, David H.
Loyd, Richard E.
Martin, Michael C.
Myers, Paul W.
Roe, Rhett A.
West, Rodney J.



Second Revision No. 7575-NFPA 70-2018 [Annex C]

Informative Annex C Conduit, Tubing, and Cable Tray Fill Tables for Conductors and Fixture Wires of the Same Size

This informative annex is not a part of the requirements of this NFPA document but is included for informational purposes only.

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*Where this table is used in conjunction with Tables C.1 through C.13, the conductors installed must be of the compact type.

Table C.1 Maximum Number of Conductors or Fixture Wires in Electrical Metallic Tubing (EMT) (Based on Chapter 9: Table 1, Table 4, and Table 5)

Type	Conductor Size (AWG/kcmil)	Trade Size (Metric Designator)											
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$\frac{1}{4}$ (35)	$\frac{1}{2}$ (41)	$\frac{2}{53}$	$\frac{2}{2}$ (63)	$\frac{3}{78}$	$\frac{3}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$
CONDUCTORS													
RHH, RHW, RHW-2	14	—	4	7	11	20	27	46	80	120	157	201	—
	12	—	3	6	9	17	23	38	66	100	131	167	—
	10	—	2	5	8	13	18	30	53	81	105	135	—
	8	—	1	2	4	7	9	16	28	42	55	70	—
	6	—	1	1	3	5	8	13	22	34	44	56	—
	4	—	1	1	2	4	6	10	17	26	34	44	—
	3	—	1	1	1	4	5	9	15	23	30	38	—

Type	Conductor Size (AWG/kcmil)	Trade Size (Metric Designator)											
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$
	2	—	1	1	1	3	4	7	13	20	26	33	—
	1	—	0	1	1	1	3	5	9	13	17	22	—
	1/0	—	0	1	1	1	2	4	7	11	15	19	—
	2/0	—	0	1	1	1	2	4	6	10	13	17	—
	3/0	—	0	0	1	1	1	3	5	8	11	14	—
	4/0	—	0	0	1	1	1	3	5	7	9	12	—
	250	—	0	0	0	1	1	1	3	5	7	9	—
	300	—	0	0	0	1	1	1	3	5	6	8	—
	350	—	0	0	0	1	1	1	3	4	6	7	—
	400	—	0	0	0	1	1	1	2	4	5	7	—
	500	—	0	0	0	0	1	1	2	3	4	6	—
	600	—	0	0	0	0	1	1	1	3	4	5	—
	700	—	0	0	0	0	0	1	1	2	3	4	—
	750	—	0	0	0	0	0	1	1	2	3	4	—
	800	—	0	0	0	0	0	1	1	2	3	4	—
	900	—	0	0	0	0	0	1	1	1	3	3	—
	1000	—	0	0	0	0	0	1	1	1	2	3	—
	1250	—	0	0	0	0	0	0	1	1	1	2	—
	1500	—	0	0	0	0	0	0	1	1	1	1	—
	1750	—	0	0	0	0	0	0	1	1	1	1	—
	2000	—	0	0	0	0	0	0	1	1	1	1	—
TW, THHW, THW, THW-2	14	—	8	15	25	43	58	96	168	254	332	424	—
	12	—	6	11	19	33	45	74	129	195	255	326	—
	10	—	5	8	14	24	33	55	96	145	190	243	—
	8	—	2	5	8	13	18	30	53	81	105	135	—
RHH*, RHW*, RHW-2*	14	—	6	10	16	28	39	64	112	169	221	282	—
	12	—	4	8	13	23	31	51	90	136	177	227	—
	10	—	3	6	10	18	24	40	70	106	138	177	—
	8	—	1	4	6	10	14	24	42	63	83	106	—
TW, THW, THHW, THW-2, RHH*, RHW*, RHW-2*	6	—	1	3	4	8	11	18	32	48	63	81	—
	4	—	1	1	3	6	8	13	24	36	47	60	—
	3	—	1	1	3	5	7	12	20	31	40	52	—
	2	—	1	1	2	4	6	10	17	26	34	44	—
	1	—	1	1	1	3	4	7	12	18	24	31	—
	1/0	—	0	1	1	2	3	6	10	16	20	26	—
	2/0	—	0	1	1	1	3	5	9	13	17	22	—
	3/0	—	0	1	1	1	2	4	7	11	15	19	—
	4/0	—	0	0	1	1	1	3	6	9	12	16	—
	250	—	0	0	1	1	1	3	5	7	10	13	—
	300	—	0	0	1	1	1	2	4	6	8	11	—
	350	—	0	0	0	1	1	1	4	6	7	10	—
	400	—	0	0	0	1	1	1	3	5	7	9	—
	500	—	0	0	0	1	1	1	3	4	6	7	—
	600	—	0	0	0	1	1	1	2	3	4	6	—
	700	—	0	0	0	0	1	1	1	3	4	5	—
	750	—	0	0	0	0	1	1	1	3	4	5	—

Type	Conductor Size (AWG/kcmil)	Trade Size (Metric Designator)											
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$
	800	—	0	0	0	0	1	1	1	3	3	5	—
	900	—	0	0	0	0	0	1	1	2	3	4	—
	1000	—	0	0	0	0	0	1	1	2	3	4	—
	1250	—	0	0	0	0	0	1	1	1	2	3	—
	1500	—	0	0	0	0	0	1	1	1	1	2	—
	1750	—	0	0	0	0	0	0	1	1	1	2	—
	2000	—	0	0	0	0	0	0	1	1	1	1	—
THHN, THWN, THWN-2	14	—	12	22	35	61	84	138	241	364	476	608	—
	12	—	9	16	26	45	61	101	176	266	347	443	—
	10	—	5	10	16	28	38	63	111	167	219	279	—
	8	—	3	6	9	16	22	36	64	96	126	161	—
	6	—	2	4	7	12	16	26	46	69	91	116	—
	4	—	1	2	4	7	10	16	28	43	56	71	—
	3	—	1	1	3	6	8	13	24	36	47	60	—
	2	—	1	1	3	5	7	11	20	30	40	51	—
	1	—	1	1	1	4	5	8	15	22	29	37	—
	1/0	—	1	1	1	3	4	7	12	19	25	32	—
	2/0	—	0	1	1	2	3	6	10	16	20	26	—
	3/0	—	0	1	1	1	3	5	8	13	17	22	—
	4/0	—	0	1	1	1	2	4	7	11	14	18	—
	250	—	0	0	1	1	1	3	6	9	11	15	—
	300	—	0	0	1	1	1	3	5	7	10	13	—
	350	—	0	0	1	1	1	2	4	6	9	11	—
	400	—	0	0	0	1	1	1	4	6	8	10	—
	500	—	0	0	0	1	1	1	3	5	6	8	—
	600	—	0	0	0	1	1	1	2	4	5	7	—
	700	—	0	0	0	1	1	1	2	3	4	6	—
750	—	0	0	0	0	1	1	1	3	4	5	—	
800	—	0	0	0	0	1	1	1	3	4	5	—	
900	—	0	0	0	0	1	1	1	3	3	4	—	
1000	—	0	0	0	0	1	1	1	2	3	4	—	
FEP, FEPB, PFA, PFAH, TFE	14	—	12	21	34	60	81	134	234	354	462	590	—
	12	—	9	15	25	43	59	98	171	258	337	430	—
	10	—	6	11	18	31	42	70	122	185	241	309	—
	8	—	3	6	10	18	24	40	70	106	138	177	—
	6	—	2	4	7	12	17	28	50	75	98	126	—
	4	—	1	3	5	9	12	20	35	53	69	88	—
	3	—	1	2	4	7	10	16	29	44	57	73	—
	2	—	1	1	3	6	8	13	24	36	47	60	—
PFA, PFAH, TFE	1	—	1	1	2	4	6	9	16	25	33	42	—
PFA, PFAH, TFE, Z	1/0	—	1	1	1	3	5	8	14	21	27	35	—
	2/0	—	0	1	1	3	4	6	11	17	22	29	—
	3/0	—	0	1	1	2	3	5	9	14	18	24	—
	4/0	—	0	1	1	1	2	4	8	11	15	19	—

Type	Conductor Size (AWG/kcmil)	Trade Size (Metric Designator)											
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\overset{1}{\underset{(27)}{}}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\overset{2}{\underset{(53)}{}}$	$2\frac{1}{2}$ (63)	$\overset{3}{\underset{(78)}{}}$	$3\frac{1}{2}$ (91)	$\overset{4}{\underset{(103)}{}}$	$\overset{5}{\underset{(129)}{}}$
Z	14	—	14	25	41	72	98	161	282	426	556	711	—
	12	—	10	18	29	51	69	114	200	302	394	504	—
	10	—	6	11	18	31	42	70	122	185	241	309	—
	8	—	4	7	11	20	27	44	77	117	153	195	—
	6	—	3	5	8	14	19	31	54	82	107	137	—
	4	—	1	3	5	9	13	21	37	56	74	94	—
	3	—	1	2	4	7	9	15	27	41	54	69	—
	2	—	1	1	3	6	8	13	22	34	45	57	—
	1	—	1	1	2	4	6	10	18	28	36	46	—
XHHW, ZW, XHHW-2, XHH	14	—	8	15	25	43	58	96	168	254	332	424	—
	12	—	6	11	19	33	45	74	129	195	255	326	—
	10	—	5	8	14	24	33	55	96	145	190	243	—
	8	—	2	5	8	13	18	30	53	81	105	135	—
	6	—	1	3	6	10	14	22	39	60	78	100	—
	4	—	1	2	4	7	10	16	28	43	56	72	—
	3	—	1	1	3	6	8	14	24	36	48	61	—
	2	—	1	1	3	5	7	11	20	31	40	51	—
XHHW, XHHW-2, XHH	1	—	1	1	1	4	5	8	15	23	30	38	—
	1/0	—	1	1	1	3	4	7	13	19	25	32	—
	2/0	—	0	1	1	2	3	6	10	16	21	27	—
	3/0	—	0	1	1	1	3	5	9	13	17	22	—
	4/0	—	0	1	1	1	2	4	7	11	14	18	—
	250	—	0	0	1	1	1	3	6	9	12	15	—
	300	—	0	0	1	1	1	3	5	8	10	13	—
	350	—	0	0	1	1	1	2	4	7	9	11	—
	400	—	0	0	0	1	1	1	4	6	8	10	—
	500	—	0	0	0	1	1	1	3	5	6	8	—
	600	—	0	0	0	1	1	1	2	4	5	6	—
	700	—	0	0	0	0	1	1	2	3	4	6	—
	750	—	0	0	0	0	1	1	1	3	4	5	—
	800	—	0	0	0	0	1	1	1	3	4	5	—
	900	—	0	0	0	0	1	1	1	3	3	4	—
	1000	—	0	0	0	0	0	1	1	2	3	4	—
	1250	—	0	0	0	0	0	1	1	1	2	3	—
	1500	—	0	0	0	0	0	1	1	1	1	3	—
	1750	—	0	0	0	0	0	0	1	1	1	2	—
	2000	—	0	0	0	0	0	0	1	1	1	1	—
FIXTURE WIRES													
RFH-2, FFH-2, RFHH-2	18	—	8	14	24	41	56	92	161	244	318	407	—
	16	—	7	12	20	34	47	78	136	205	268	343	—
SF-2, SFF-2	18	—	10	18	30	52	71	116	203	307	401	513	—
	16	—	8	15	25	43	58	96	168	254	332	424	—
	14	—	7	12	20	34	47	78	136	205	268	343	—
SF-1, SFF-1	18	—	18	33	53	92	125	206	360	544	710	908	—

Type	Conductor Size (AWG/kcmil)	Trade Size (Metric Designator)											
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{2}$ (27)	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$
RFH-1, TF, TFF, XF, XFF	18	—	14	24	39	68	92	152	266	402	524	670	—
	16	—	11	19	31	55	74	123	215	324	423	541	—
XF, XFF	14	—	8	15	25	43	58	96	168	254	332	424	—
TFN, TFFN	18	—	22	38	63	109	148	244	426	643	839	1073	—
	16	—	17	29	48	83	113	186	325	491	641	819	—
PF, PFF, PGF, PGFF, PAF, PTF, PTFF, PAFF	18	—	21	36	59	103	140	231	404	610	796	1017	—
	16	—	16	28	46	79	108	179	312	471	615	787	—
	14	—	12	21	34	60	81	134	234	354	462	590	—
ZF, ZFF, ZHF	18	—	27	47	77	133	181	298	520	786	1026	1311	—
	16	—	20	35	56	98	133	220	384	580	757	967	—
	14	—	14	25	41	72	98	161	282	426	556	711	—
KF-2, KFF-2	18	—	40	71	115	199	271	447	781	1179	1539	1967	—
	16	—	28	49	80	139	189	312	545	823	1074	1372	—
	14	—	19	33	54	93	127	209	366	553	721	922	—
	12	—	13	23	37	65	88	146	254	384	502	641	—
	10	—	8	15	25	43	58	96	168	254	332	424	—
KF-1, KFF-1	18	—	46	82	133	230	313	516	901	1361	1776	2269	—
	16	—	33	57	93	161	220	363	633	956	1248	1595	—
	14	—	22	38	63	109	148	244	426	643	839	1073	—
	12	—	14	25	41	72	98	161	282	426	556	711	—
	10	—	9	16	27	47	64	105	184	278	363	464	—
XF, XFF	12	—	4	8	13	23	31	51	90	136	177	227	—
	10	—	3	6	10	18	24	40	70	106	138	177	—

Notes:

1. This table is for concentric stranded conductors only. For compact stranded conductors, Table C.1(A) should be used.

2. Two-hour fire-rated RHH cable has ceramifiable insulation, which has much larger diameters than other RHH wires.

Consult manufacturer's conduit fill tables.

*Types RHH, RHW, and RHW-2 without outer covering.

Table C.1(A) Maximum Number of Conductors or Fixture Wires in Electrical Metallic Tubing (EMT)
(Based on Chapter 9: Table 1, Table 4, and Table 5A)

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$	$\frac{1}{1}$
COMPACT CONDUCTORS														
THW, THW-2, THHW	8	—	2	4	6	11	16	26	46	69	90	115	—	—
	6	—	1	3	5	9	12	20	35	53	70	89	—	—
	4	—	1	2	4	6	9	15	26	40	52	67	—	—
	2	—	1	1	3	5	7	11	19	29	38	49	—	—
	1	—	1	1	1	3	4	8	13	21	27	34	—	—
	1/0	—	1	1	1	3	4	7	12	18	23	30	—	—

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)													
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$ (27)	$\frac{1}{4}$ (35)	$\frac{1}{2}$ (41)	$\frac{2}{53}$ (53)	$\frac{2}{2}$ (63)	$\frac{3}{78}$ (78)	$\frac{3}{2}$ (91)	$\frac{4}{103}$ (103)	$\frac{5}{129}$ (129)	$\frac{6}{150}$ (150)	
THHN, THWN, THWN-2	2/0	—	0	1	1	2	3	5	10	15	20	25	—	—	
	3/0	—	0	1	1	1	3	5	8	13	17	21	—	—	
	4/0	—	0	1	1	1	2	4	7	11	14	18	—	—	
	250	—	0	0	1	1	1	3	5	8	11	14	—	—	
	300	—	0	0	1	1	1	3	5	7	9	12	—	—	
	350	—	0	0	1	1	1	2	4	6	8	11	—	—	
	400	—	0	0	0	1	1	1	4	6	8	10	—	—	
	500	—	0	0	0	1	1	1	3	5	6	8	—	—	
	600	—	0	0	0	1	1	1	2	4	5	7	—	—	
	700	—	0	0	0	1	1	1	2	3	4	6	—	—	
	750	—	0	0	0	0	1	1	1	3	4	5	—	—	
	900	—	0	0	0	0	1	1	1	3	4	5	—	—	
	1000	—	0	0	0	0	1	1	1	2	3	4	—	—	
	XHHW, XHHW-2	8	—	—	—	—	—	—	—	—	—	—	—	—	—
6		—	2	4	7	13	18	29	52	78	102	130	—	—	
4		—	1	3	4	8	11	18	32	48	63	81	—	—	
2		—	1	1	3	6	8	13	23	34	45	58	—	—	
1		—	1	1	2	4	6	10	17	26	34	43	—	—	
1/0		—	1	1	1	3	5	8	14	22	29	37	—	—	
2/0		—	1	1	1	3	4	7	12	18	24	30	—	—	
3/0		—	0	1	1	2	3	6	10	15	20	25	—	—	
4/0		—	0	1	1	1	3	5	8	12	16	21	—	—	
250		—	0	1	1	1	1	4	6	10	13	16	—	—	
300		—	0	0	1	1	1	3	5	8	11	14	—	—	
350		—	0	0	1	1	1	3	5	7	10	12	—	—	
400		—	0	0	1	1	1	2	4	6	9	11	—	—	
500		—	0	0	0	1	1	1	4	5	7	9	—	—	
600	—	0	0	0	1	1	1	3	4	6	7	—	—		
700	—	0	0	0	1	1	1	2	4	5	7	—	—		
750	—	0	0	0	1	1	1	2	4	5	6	—	—		
900	—	0	0	0	0	1	1	1	3	4	5	—	—		
1000	—	0	0	0	0	1	1	1	3	3	4	—	—		

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)											
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$ (27)	$\frac{1}{4}$ (35)	$\frac{1}{2}$ (41)	$\frac{2}{53}$ (53)	$\frac{2}{2}$ (63)	$\frac{3}{78}$ (78)	$\frac{3}{2}$ (91)	$\frac{4}{103}$ (103)	$\frac{5}{129}$ (129)
	500	—	0	0	0	1	1	1	4	6	7	9	—
	600	—	0	0	0	1	1	1	3	4	6	8	—
	700	—	0	0	0	1	1	1	2	4	5	7	—
	750	—	0	0	0	1	1	1	2	3	5	6	—
	900	—	0	0	0	0	1	1	1	3	4	5	—
	1000	—	0	0	0	0	1	1	1	3	4	5	—

Definition: *Compact stranding* is the result of a manufacturing process where the stranded conductor is compressed to the extent that the interstices (voids between strand wires) are virtually eliminated.

Table C.2 Maximum Number of Conductors or Fixture Wires in Electrical Nonmetallic Tubing (ENT)
(Based on Chapter 9: Table 1, Table 4, and Table 5)

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$ (27)	$\frac{1}{4}$ (35)	$\frac{1}{2}$ (41)	$\frac{2}{53}$ (53)	$\frac{2}{2}$ (63)	$\frac{3}{78}$ (78)	$\frac{3}{2}$ (91)	$\frac{4}{103}$ (103)	$\frac{5}{129}$ (129)	$\frac{6}{150}$ (150)
CONDUCTORS														
RHH, RHW, RHW-2	14	—	4	7	11	20	27	45	—	—	—	—	—	—
	12	—	3	5	9	16	22	37	—	—	—	—	—	—
	10	—	2	4	7	13	18	30	—	—	—	—	—	—
	8	—	1	2	4	7	9	15	—	—	—	—	—	—
	6	—	1	1	3	5	7	12	—	—	—	—	—	—
	4	—	1	1	2	4	6	10	—	—	—	—	—	—
	3	—	1	1	1	4	5	8	—	—	—	—	—	—
	2	—	1	1	1	3	4	7	—	—	—	—	—	—
	1	—	0	1	1	1	3	5	—	—	—	—	—	—
	1/0	—	0	1	1	1	2	4	—	—	—	—	—	—
	2/0	—	0	0	1	1	1	3	—	—	—	—	—	—
	3/0	—	0	0	1	1	1	3	—	—	—	—	—	—
	4/0	—	0	0	1	1	1	2	—	—	—	—	—	—
	250	—	0	0	0	1	1	1	—	—	—	—	—	—
	300	—	0	0	0	1	1	1	—	—	—	—	—	—
	350	—	0	0	0	1	1	1	—	—	—	—	—	—
	400	—	0	0	0	1	1	1	—	—	—	—	—	—
	500	—	0	0	0	0	1	1	—	—	—	—	—	—
	600	—	0	0	0	0	1	1	—	—	—	—	—	—
	700	—	0	0	0	0	0	1	—	—	—	—	—	—
	750	—	0	0	0	0	0	1	—	—	—	—	—	—
	800	—	0	0	0	0	0	1	—	—	—	—	—	—
	900	—	0	0	0	0	0	1	—	—	—	—	—	—
	1000	—	0	0	0	0	0	1	—	—	—	—	—	—
	1250	—	0	0	0	0	0	0	—	—	—	—	—	—
	1500	—	0	0	0	0	0	0	—	—	—	—	—	—
	1750	—	0	0	0	0	0	0	—	—	—	—	—	—
	2000	—	0	0	0	0	0	0	—	—	—	—	—	—
TW, THHW, THW,	14	—	8	14	24	42	57	94	—	—	—	—	—	—
	12	—	6	11	18	32	44	72	—	—	—	—	—	—
	10	—	4	8	13	24	32	54	—	—	—	—	—	—

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$	(1
THW-2	8	—	2	4	7	13	18	30	—	—	—	—	—	—
RHH*, RHW*, RHW-2*	14	—	5	9	16	28	38	63	—	—	—	—	—	—
	12	—	4	8	13	22	30	50	—	—	—	—	—	—
	10	—	3	6	10	17	24	39	—	—	—	—	—	—
	8	—	1	3	6	10	14	23	—	—	—	—	—	—
TW, THW, THHW, THW-2, RHH*, RHW*, RHW-2*	6	—	1	2	4	8	11	18	—	—	—	—	—	—
	4	—	1	1	3	6	8	13	—	—	—	—	—	—
	3	—	1	1	3	5	7	11	—	—	—	—	—	—
	2	—	1	1	2	4	6	10	—	—	—	—	—	—
	1	—	0	1	1	3	4	7	—	—	—	—	—	—
	1/0	—	0	1	1	2	3	6	—	—	—	—	—	—
	2/0	—	0	1	1	1	3	5	—	—	—	—	—	—
	3/0	—	0	1	1	1	2	4	—	—	—	—	—	—
	4/0	—	0	0	1	1	1	3	—	—	—	—	—	—
	250	—	0	0	1	1	1	3	—	—	—	—	—	—
	300	—	0	0	1	1	1	2	—	—	—	—	—	—
	350	—	0	0	0	1	1	1	—	—	—	—	—	—
	400	—	0	0	0	1	1	1	—	—	—	—	—	—
	500	—	0	0	0	1	1	1	—	—	—	—	—	—
	600	—	0	0	0	0	1	1	—	—	—	—	—	—
	700	—	0	0	0	0	1	1	—	—	—	—	—	—
	750	—	0	0	0	0	1	1	—	—	—	—	—	—
	800	—	0	0	0	0	1	1	—	—	—	—	—	—
	900	—	0	0	0	0	0	1	—	—	—	—	—	—
	1000	—	0	0	0	0	0	1	—	—	—	—	—	—
	1250	—	0	0	0	0	0	1	—	—	—	—	—	—
	1500	—	0	0	0	0	0	1	—	—	—	—	—	—
	1750	—	0	0	0	0	0	0	—	—	—	—	—	—
	2000	—	0	0	0	0	0	0	—	—	—	—	—	—
THHN, THWN, THWN-2	14	—	11	21	34	60	82	135	—	—	—	—	—	—
	12	—	8	15	25	43	59	99	—	—	—	—	—	—
	10	—	5	9	15	27	37	62	—	—	—	—	—	—
	8	—	3	5	9	16	21	36	—	—	—	—	—	—
	6	—	1	4	6	11	15	26	—	—	—	—	—	—
	4	—	1	2	4	7	9	16	—	—	—	—	—	—
	3	—	1	1	3	6	8	13	—	—	—	—	—	—
	2	—	1	1	3	5	7	11	—	—	—	—	—	—
	1	—	1	1	1	3	5	8	—	—	—	—	—	—
	1/0	—	1	1	1	3	4	7	—	—	—	—	—	—
	2/0	—	0	1	1	2	3	6	—	—	—	—	—	—
	3/0	—	0	1	1	1	3	5	—	—	—	—	—	—
	4/0	—	0	1	1	1	2	4	—	—	—	—	—	—
	250	—	0	0	1	1	1	3	—	—	—	—	—	—
	300	—	0	0	1	1	1	3	—	—	—	—	—	—
	350	—	0	0	1	1	1	2	—	—	—	—	—	—

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)											
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$ (1
	400	—	0	0	0	1	1	1	—	—	—	—	—
	500	—	0	0	0	1	1	1	—	—	—	—	—
	600	—	0	0	0	1	1	1	—	—	—	—	—
	700	—	0	0	0	0	1	1	—	—	—	—	—
	750	—	0	0	0	0	1	1	—	—	—	—	—
	800	—	0	0	0	0	1	1	—	—	—	—	—
	900	—	0	0	0	0	1	1	—	—	—	—	—
	1000	—	0	0	0	0	0	1	—	—	—	—	—
FEP, FEPB, PFA, PFAH, TFE	14	—	11	20	33	58	79	131	—	—	—	—	—
	12	—	8	15	24	42	58	96	—	—	—	—	—
	10	—	6	10	17	30	41	69	—	—	—	—	—
	8	—	3	6	10	17	24	39	—	—	—	—	—
	6	—	2	4	7	12	17	28	—	—	—	—	—
	4	—	1	3	5	8	12	19	—	—	—	—	—
	3	—	1	2	4	7	10	16	—	—	—	—	—
	2	—	1	1	3	6	8	13	—	—	—	—	—
PFA, PFAH, TFE	1	—	1	1	2	4	5	9	—	—	—	—	—
PFA, PFAH, TFE, Z	1/0	—	1	1	1	3	4	8	—	—	—	—	—
	2/0	—	0	1	1	3	4	6	—	—	—	—	—
	3/0	—	0	1	1	2	3	5	—	—	—	—	—
	4/0	—	0	1	1	1	2	4	—	—	—	—	—
Z	14	—	13	24	40	70	95	158	—	—	—	—	—
	12	—	9	17	28	49	68	112	—	—	—	—	—
	10	—	6	10	17	30	41	69	—	—	—	—	—
	8	—	3	6	11	19	26	43	—	—	—	—	—
	6	—	2	4	7	13	18	30	—	—	—	—	—
	4	—	1	3	5	9	12	21	—	—	—	—	—
	3	—	1	2	4	6	9	15	—	—	—	—	—
	2	—	1	1	3	5	7	12	—	—	—	—	—
XHHW, ZW, XHHW-2, XHH	1	—	1	1	2	4	6	10	—	—	—	—	—
	14	—	8	14	24	42	57	94	—	—	—	—	—
	12	—	6	11	18	32	44	72	—	—	—	—	—
	10	—	4	8	13	24	32	54	—	—	—	—	—
	8	—	2	4	7	13	18	30	—	—	—	—	—
	6	—	1	3	5	10	13	22	—	—	—	—	—
	4	—	1	2	4	7	9	16	—	—	—	—	—
	3	—	1	1	3	6	8	13	—	—	—	—	—
XHHW, XHHW-2, XHH	2	—	1	1	3	5	7	11	—	—	—	—	—
	1	—	1	1	1	3	5	8	—	—	—	—	—
	1/0	—	0	1	1	3	4	7	—	—	—	—	—
	2/0	—	0	1	1	2	3	6	—	—	—	—	—
	3/0	—	0	1	1	1	3	5	—	—	—	—	—
	4/0	—	0	1	1	1	2	4	—	—	—	—	—
	250	—	0	0	1	1	1	3	—	—	—	—	—

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)											
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$ (1
	300	—	0	0	1	1	1	3	—	—	—	—	—
	350	—	0	0	1	1	1	2	—	—	—	—	—
	400	—	0	0	0	1	1	1	—	—	—	—	—
	500	—	0	0	0	1	1	1	—	—	—	—	—
	600	—	0	0	0	1	1	1	—	—	—	—	—
	700	—	0	0	0	0	1	1	—	—	—	—	—
	750	—	0	0	0	0	1	1	—	—	—	—	—
	800	—	0	0	0	0	1	1	—	—	—	—	—
	900	—	0	0	0	0	1	1	—	—	—	—	—
	1000	—	0	0	0	0	0	1	—	—	—	—	—
	1250	—	0	0	0	0	0	1	—	—	—	—	—
	1500	—	0	0	0	0	0	1	—	—	—	—	—
	1750	—	0	0	0	0	0	0	—	—	—	—	—
	2000	—	0	0	0	0	0	0	—	—	—	—	—
FIXTURE WIRES													
RFH-2, FFH-2, RFHH-2	18	—	8	14	23	40	54	90	—	—	—	—	—
	16	—	6	12	19	33	46	76	—	—	—	—	—
SF-2, SFF-2	18	—	10	17	29	50	69	114	—	—	—	—	—
	16	—	8	14	24	42	57	94	—	—	—	—	—
	14	—	6	12	19	33	46	76	—	—	—	—	—
SF-1, SFF-1	18	—	17	31	51	89	122	202	—	—	—	—	—
RFH-1, TF, TFF, XF, XFF	18	—	13	23	38	66	90	149	—	—	—	—	—
	16	—	10	18	30	53	73	120	—	—	—	—	—
XF, XFF	14	—	8	14	24	42	57	94	—	—	—	—	—
TFN, TFFN	18	—	20	37	60	105	144	239	—	—	—	—	—
	16	—	16	28	46	80	110	183	—	—	—	—	—
PF, PFF, PGF, PGFF, PAF, PTF, PTFF, PAFF	18	—	19	35	57	100	137	227	—	—	—	—	—
	16	—	15	27	44	77	106	175	—	—	—	—	—
	14	—	11	20	33	58	79	131	—	—	—	—	—
ZF, ZFF, ZHF	18	—	25	45	74	129	176	292	—	—	—	—	—
	16	—	18	33	54	95	130	216	—	—	—	—	—
	14	—	13	24	40	70	95	158	—	—	—	—	—
KF-2, KFF-2	18	—	38	67	111	193	265	439	—	—	—	—	—
	16	—	26	47	77	135	184	306	—	—	—	—	—
	14	—	18	31	52	91	124	205	—	—	—	—	—
	12	—	12	22	36	63	86	143	—	—	—	—	—
	10	—	8	14	24	42	57	94	—	—	—	—	—
KF-1, KFF-1	18	—	44	78	128	223	305	506	—	—	—	—	—

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)											
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$
	16	—	31	55	90	157	214	355	—	—	—	—	—
	14	—	20	37	60	105	144	239	—	—	—	—	—
	12	—	13	24	40	70	95	158	—	—	—	—	—
	10	—	9	16	26	45	62	103	—	—	—	—	—
XF, XFF	12	—	4	8	13	22	30	50	—	—	—	—	—
	10	—	3	6	10	17	24	39	—	—	—	—	—

Notes:

1. This table is for concentric stranded conductors only. For compact stranded conductors, Table C.2(A) should be used.

2. Two-hour fire-rated RHH cable has ceramifiable insulation, which has much larger diameters than other RHH wires.

Consult manufacturer's conduit fill tables.

*Types RHH, RHW, and RHW-2 without outer covering.

Table C.2(A) Maximum Number of Conductors or Fixture Wires in Electrical Nonmetallic Tubing (ENT)
(Based on Chapter 9: Table 1, Table 4, and Table 5A)

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$	$\frac{1}{16}$ (4)
COMPACT CONDUCTORS														
THW, THW-2, THHW	8	—	1	4	6	11	15	26	—	—	—	—	—	—
	6	—	1	3	5	9	12	20	—	—	—	—	—	—
	4	—	1	1	3	6	9	15	—	—	—	—	—	—
	2	—	1	1	2	5	6	11	—	—	—	—	—	—
	1	—	1	1	1	3	4	7	—	—	—	—	—	—
	1/0	—	0	1	1	3	4	6	—	—	—	—	—	—
	2/0	—	0	1	1	2	3	5	—	—	—	—	—	—
	3/0	—	0	1	1	1	3	5	—	—	—	—	—	—
	4/0	—	0	1	1	1	2	4	—	—	—	—	—	—
	250	—	0	0	1	1	1	3	—	—	—	—	—	—
	300	—	0	0	1	1	1	2	—	—	—	—	—	—
	350	—	0	0	1	1	1	2	—	—	—	—	—	—
	400	—	0	0	0	1	1	1	—	—	—	—	—	—
	500	—	0	0	0	1	1	1	—	—	—	—	—	—
	600	—	0	0	0	1	1	1	—	—	—	—	—	—
	700	—	0	0	0	0	1	1	—	—	—	—	—	—
	750	—	0	0	0	0	1	1	—	—	—	—	—	—
	900	—	0	0	0	0	1	1	—	—	—	—	—	—
	1000	—	0	0	0	0	1	1	—	—	—	—	—	—
THHN, THWN, THWN-2	8	—	—	—	—	—	—	—	—	—	—	—	—	—
	6	—	2	4	7	13	17	29	—	—	—	—	—	—
	4	—	1	2	4	8	11	18	—	—	—	—	—	—
	2	—	1	1	3	5	8	13	—	—	—	—	—	—
	1	—	1	1	2	4	6	9	—	—	—	—	—	—
	1/0	—	1	1	1	3	5	8	—	—	—	—	—	—
	2/0	—	0	1	1	3	4	7	—	—	—	—	—	—

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$ (27)	$\frac{1}{4}$ (35)	$\frac{1}{2}$ (41)	$\frac{2}{53}$ (53)	$\frac{2}{2}$ (63)	$\frac{3}{78}$ (78)	$\frac{3}{2}$ (91)	$\frac{4}{103}$ (103)	$\frac{5}{129}$ (129)	$\frac{6}{146}$ (146)
XHHW, XHHW-2	3/0	—	0	1	1	2	3	5	—	—	—	—	—	—
	4/0	—	0	1	1	1	3	4	—	—	—	—	—	—
	250	—	0	0	1	1	1	3	—	—	—	—	—	—
	300	—	0	0	1	1	1	3	—	—	—	—	—	—
	350	—	0	0	1	1	1	3	—	—	—	—	—	—
	400	—	0	0	1	1	1	2	—	—	—	—	—	—
	500	—	0	0	0	1	1	1	—	—	—	—	—	—
	600	—	0	0	0	1	1	1	—	—	—	—	—	—
	700	—	0	0	0	1	1	1	—	—	—	—	—	—
	750	—	0	0	0	1	1	1	—	—	—	—	—	—
	900	—	0	0	0	0	1	1	—	—	—	—	—	—
	1000	—	0	0	0	0	1	1	—	—	—	—	—	—
	8	—	3	5	8	14	20	33	—	—	—	—	—	—
	6	—	1	4	6	11	15	25	—	—	—	—	—	—
	4	—	1	2	4	8	11	18	—	—	—	—	—	—
	2	—	1	1	3	5	8	13	—	—	—	—	—	—
	1	—	1	1	2	4	6	9	—	—	—	—	—	—
	1/0	—	1	1	1	3	5	8	—	—	—	—	—	—
	2/0	—	1	1	1	3	4	7	—	—	—	—	—	—
	3/0	—	0	1	1	2	3	5	—	—	—	—	—	—
	4/0	—	0	1	1	1	3	5	—	—	—	—	—	—
RHH, RHW, RHW-2	250	—	0	0	1	1	1	4	—	—	—	—	—	—
	300	—	0	0	1	1	1	3	—	—	—	—	—	—
	350	—	0	0	1	1	1	3	—	—	—	—	—	—
	400	—	0	0	1	1	1	2	—	—	—	—	—	—
	500	—	0	0	0	1	1	1	—	—	—	—	—	—
	600	—	0	0	0	1	1	1	—	—	—	—	—	—
RHH, RHW, RHW-2	700	—	0	0	0	1	1	1	—	—	—	—	—	—
	750	—	0	0	0	1	1	1	—	—	—	—	—	—
	900	—	0	0	0	0	1	1	—	—	—	—	—	—
	1000	—	0	0	0	0	1	1	—	—	—	—	—	—
	1000	—	0	0	0	0	1	1	—	—	—	—	—	—

Definition: *Compact stranding* is the result of a manufacturing process where the stranded conductor is compressed to the extent that the interstices (voids between strand wires) are virtually eliminated.

Table C.3 Maximum Number of Conductors or Fixture Wires in Flexible Metal Conduit (FMC) (Based on Chapter 9: Table 1, Table 4, and Table 5)

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		³ / ₈ (12)	¹ / ₂ (16)	³ / ₄ (21)	<u>1</u> (27)	<u>1</u> / ₄ (35)	<u>1</u> / ₂ (41)	<u>2</u> (53)	<u>2</u> / ₁ / ₂ (63)	<u>3</u> (78)	<u>3</u> / ₁ / ₂ (91)	<u>4</u> (103)	<u>5</u> (129)	(146)
CONDUCTORS														
RHH, RHW, RHW-2	14	1	4	7	11	17	25	44	67	96	131	171	—	—
	12	1	3	6	9	14	21	37	55	80	109	142	—	—
	10	1	3	5	7	11	17	30	45	64	88	115	—	—
	8	0	1	2	4	6	9	15	23	34	46	60	—	—
	6	0	1	1	3	5	7	12	19	27	37	48	—	—
	4	0	1	1	2	4	5	10	14	21	29	37	—	—

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)											
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$
	3	0	1	1	1	3	5	8	13	18	25	33	—
	2	0	1	1	1	3	4	7	11	16	22	28	—
	1	0	0	1	1	1	2	5	7	10	14	19	—
	1/0	0	0	1	1	1	2	4	6	9	12	16	—
	2/0	0	0	1	1	1	1	3	5	8	11	14	—
	3/0	0	0	0	1	1	1	3	5	7	9	12	—
	4/0	0	0	0	1	1	1	2	4	6	8	10	—
	250	0	0	0	0	1	1	1	3	4	6	8	—
	300	0	0	0	0	1	1	1	2	4	5	7	—
	350	0	0	0	0	1	1	1	2	3	5	6	—
	400	0	0	0	0	0	1	1	1	3	4	6	—
	500	0	0	0	0	0	1	1	1	3	4	5	—
	600	0	0	0	0	0	1	1	1	2	3	4	—
	700	0	0	0	0	0	0	1	1	1	3	3	—
	750	0	0	0	0	0	0	1	1	1	2	3	—
	800	0	0	0	0	0	0	1	1	1	2	3	—
	900	0	0	0	0	0	0	1	1	1	2	3	—
	1000	0	0	0	0	0	0	1	1	1	1	3	—
	1250	0	0	0	0	0	0	0	1	1	1	1	—
	1500	0	0	0	0	0	0	0	1	1	1	1	—
	1750	0	0	0	0	0	0	0	1	1	1	1	—
	2000	0	0	0	0	0	0	0	0	1	1	1	—
TW, THHW, THW, THW-2	14	3	9	15	23	36	53	94	141	203	277	361	—
	12	2	7	11	18	28	41	72	108	156	212	277	—
	10	1	5	8	13	21	30	54	81	116	158	207	—
	8	1	3	5	7	11	17	30	45	64	88	115	—
RHH*, RHW*, RHW-2*	14	1	6	10	15	24	35	62	94	135	184	240	—
	12	1	5	8	12	19	28	50	75	108	148	193	—
	10	1	4	6	10	15	22	39	59	85	115	151	—
	8	1	1	4	6	9	13	23	35	51	69	90	—
TW, THW, THHW, THW-2, RHH*, RHW*, RHW-2*	6	1	1	3	4	7	10	18	27	39	53	69	—
	4	0	1	1	3	5	7	13	20	29	39	51	—
	3	0	1	1	3	4	6	11	17	25	34	44	—
	2	0	1	1	2	4	5	10	14	21	29	37	—
	1	0	1	1	1	2	4	7	10	15	20	26	—
	1/0	0	0	1	1	1	3	6	9	12	17	22	—
	2/0	0	0	1	1	1	3	5	7	10	14	19	—
	3/0	0	0	1	1	1	2	4	6	9	12	16	—
	4/0	0	0	0	1	1	1	3	5	7	10	13	—
	250	0	0	0	1	1	1	3	4	6	8	11	—
	300	0	0	0	1	1	1	2	3	5	7	9	—
	350	0	0	0	0	1	1	1	3	4	6	8	—
	400	0	0	0	0	1	1	1	3	4	6	7	—
	500	0	0	0	0	1	1	1	2	3	5	6	—
	600	0	0	0	0	0	1	1	1	3	4	5	—

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)											
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$
	700	0	0	0	0	0	1	1	1	2	3	4	—
	750	0	0	0	0	0	1	1	1	2	3	4	—
	800	0	0	0	0	0	1	1	1	1	3	4	—
	900	0	0	0	0	0	0	1	1	1	3	3	—
	1000	0	0	0	0	0	0	1	1	1	2	3	—
	1250	0	0	0	0	0	0	1	1	1	1	2	—
	1500	0	0	0	0	0	0	0	1	1	1	1	—
	1750	0	0	0	0	0	0	0	1	1	1	1	—
	2000	0	0	0	0	0	0	0	1	1	1	1	—
THHN, THWN, THWN-2	14	4	13	22	33	52	76	135	202	291	396	518	—
	12	3	9	16	24	38	56	98	147	212	289	378	—
	10	1	6	10	15	24	35	62	93	134	182	238	—
	8	1	3	6	9	14	20	35	53	77	105	137	—
	6	1	2	4	6	10	14	25	38	55	76	99	—
	4	0	1	2	4	6	9	16	24	34	46	61	—
	3	0	1	1	3	5	7	13	20	29	39	51	—
	2	0	1	1	3	4	6	11	17	24	33	43	—
	1	0	1	1	1	3	4	8	12	18	24	32	—
	1/0	0	1	1	1	2	4	7	10	15	20	27	—
	2/0	0	0	1	1	1	3	6	9	12	17	22	—
	3/0	0	0	1	1	1	2	5	7	10	14	18	—
	4/0	0	0	1	1	1	1	4	6	8	12	15	—
	250	0	0	0	1	1	1	3	5	7	9	12	—
	300	0	0	0	1	1	1	3	4	6	8	11	—
	350	0	0	0	1	1	1	2	3	5	7	9	—
	400	0	0	0	0	1	1	1	3	5	6	8	—
	500	0	0	0	0	1	1	1	2	4	5	7	—
	600	0	0	0	0	0	1	1	1	3	4	5	—
	700	0	0	0	0	0	1	1	1	3	4	5	—
	750	0	0	0	0	0	1	1	1	2	3	4	—
	800	0	0	0	0	0	1	1	1	2	3	4	—
	900	0	0	0	0	0	0	1	1	1	3	4	—
	1000	0	0	0	0	0	0	1	1	1	3	3	—
FEP, FEPB, PFA, PFAH, TFE	14	4	12	21	32	51	74	130	196	282	385	502	—
	12	3	9	15	24	37	54	95	143	206	281	367	—
	10	2	6	11	17	26	39	68	103	148	201	263	—
	8	1	4	6	10	15	22	39	59	85	115	151	—
	6	1	2	4	7	11	16	28	42	60	82	107	—
	4	1	1	3	5	7	11	19	29	42	57	75	—
	3	0	1	2	4	6	9	16	24	35	48	62	—
	2	0	1	1	3	5	7	13	20	29	39	51	—
PFA, PFAH, TFE	1	0	1	1	2	3	5	9	14	20	27	36	—
PFA, PFAH,	1/0	0	1	1	1	3	4	8	11	17	23	30	—
	2/0	0	1	1	1	2	3	6	9	14	19	24	—

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)											
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$
TFE, Z	3/0	0	0	1	1	1	3	5	8	11	15	20	—
	4/0	0	0	1	1	1	2	4	6	9	13	16	—
Z	14	5	15	25	39	61	89	157	236	340	463	605	—
	12	4	11	18	28	43	63	111	168	241	329	429	—
	10	2	6	11	17	26	39	68	103	148	201	263	—
	8	1	4	7	11	17	24	43	65	93	127	166	—
	6	1	3	5	7	12	17	30	45	65	89	117	—
	4	1	1	3	5	8	12	21	31	45	61	80	—
	3	0	1	2	4	6	8	15	23	33	45	58	—
	2	0	1	1	3	5	7	12	19	27	37	49	—
	1	0	1	1	2	4	6	10	15	22	30	39	—
	14	3	9	15	23	36	53	94	141	203	277	361	—
	12	2	7	11	18	28	41	72	108	156	212	277	—
	10	1	5	8	13	21	30	54	81	116	158	207	—
XHHW, ZW, XHHW-2, XHH	8	1	3	5	7	11	17	30	45	64	88	115	—
	6	1	1	3	5	8	12	22	33	48	65	85	—
	4	0	1	2	4	6	9	16	24	34	47	61	—
	3	0	1	1	3	5	7	13	20	29	40	52	—
	2	0	1	1	3	4	6	11	17	24	33	44	—
	1	0	1	1	1	3	5	8	13	18	25	32	—
	1/0	0	1	1	1	2	4	7	10	15	21	27	—
	2/0	0	0	1	1	2	3	6	9	13	17	23	—
XHH, XHHW, XHHW-2	3/0	0	0	1	1	1	3	5	7	10	14	19	—
	4/0	0	0	1	1	1	2	4	6	9	12	15	—
	250	0	0	0	1	1	1	3	5	7	10	13	—
	300	0	0	0	1	1	1	3	4	6	8	11	—
	350	0	0	0	1	1	1	2	4	5	7	9	—
	400	0	0	0	0	1	1	1	3	5	6	8	—
	500	0	0	0	0	1	1	1	3	4	5	7	—
	600	0	0	0	0	0	1	1	1	3	4	5	—
	700	0	0	0	0	0	1	1	1	3	4	5	—
	750	0	0	0	0	0	1	1	1	2	3	4	—
	800	0	0	0	0	0	1	1	1	2	3	4	—
	900	0	0	0	0	0	0	1	1	1	3	4	—
	1000	0	0	0	0	0	0	1	1	1	3	3	—
	1250	0	0	0	0	0	0	1	1	1	1	3	—
	1500	0	0	0	0	0	0	1	1	1	1	2	—
	1750	0	0	0	0	0	0	0	1	1	1	1	—
	2000	0	0	0	0	0	0	0	1	1	1	1	—
FIXTURE WIRES													
RFH-2, FFH-2, RFHH-2	18	3	8	14	22	35	51	90	135	195	265	346	—
	16	2	7	12	19	29	43	76	114	164	223	292	—
SF-2, SFF-2	18	4	11	18	28	44	64	113	170	246	334	437	—
	16	3	9	15	23	36	53	94	141	203	277	361	—

<u>Type</u>	<u>Conductor Size (AWG/ kcmil)</u>	<u>Trade Size (Metric Designator)</u>											
		<u>3/8(12)</u>	<u>1/2(16)</u>	<u>3/4(21)</u>	<u>1(27)</u>	<u>1 1/4(35)</u>	<u>1 1/2(41)</u>	<u>2(53)</u>	<u>2 1/2(63)</u>	<u>3(78)</u>	<u>3 1/2(91)</u>	<u>4(103)</u>	<u>5(129)</u>
	14	2	7	12	19	29	43	76	114	164	223	292	—
SF-1, SFF-1	18	7	19	33	50	78	114	201	302	435	592	773	—
RFH-1, TF, TFF, XF, XFF	18	5	14	24	37	58	84	148	223	321	437	571	—
	16	4	11	19	30	47	68	120	180	259	353	461	—
XF, XFF	14	3	9	15	23	36	53	94	141	203	277	361	—
TFN, TFFN	18	8	23	38	59	93	135	237	357	514	699	914	—
	16	6	17	29	45	71	103	181	272	392	534	698	—
PF, PFF, PGF, PGFF, PAF, PTF, PTFF, PAFF	18	8	22	36	56	88	128	225	338	487	663	866	—
	16	6	17	28	43	68	99	174	262	377	513	670	—
	14	4	12	21	32	51	74	130	196	282	385	502	—
ZF, ZFF, ZHF	18	10	28	47	72	113	165	290	436	628	855	1117	—
	16	7	20	35	53	83	122	214	322	463	631	824	—
	14	5	15	25	39	61	89	157	236	340	463	605	—
KF-2, KFF-2	18	15	42	71	109	170	247	436	654	942	1282	1675	—
	16	10	29	49	76	118	173	304	456	657	895	1169	—
	14	7	20	33	51	80	116	204	307	442	601	785	—
	12	5	13	23	35	55	80	142	213	307	418	546	—
	10	3	9	15	23	36	53	94	141	203	277	361	—
KF-1, KFF-1	18	18	48	82	125	196	286	503	755	1087	1480	1933	—
	16	12	34	57	88	138	201	353	530	764	1040	1358	—
	14	8	23	38	59	93	135	237	357	514	699	914	—
	12	5	15	25	39	61	89	157	236	340	463	605	—
	10	3	10	16	25	40	58	103	154	222	303	395	—
XF, XFF	12	1	5	8	12	19	28	50	75	108	148	193	—
	10	1	4	6	10	15	22	39	59	85	115	151	—

Notes:

1. This table is for concentric stranded conductors only. For compact stranded conductors, Table C.3(A) should be used.

2. Two-hour fire-rated RHH cable has ceramifiable insulation, which has much larger diameters than other RHH wires. Consult manufacturer's conduit fill tables.

*Types RHH, RHW, and RHW-2 without outer covering.

Table C.3(A) Maximum Number of Conductors or Fixture Wires in Flexible Metal Conduit (FMC) (Based on Chapter 9: Table 1, Table 4, and Table 5A)

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		-	-	-	-	-	-	-	-	-	-	-	-	
		<u>3/8(12)</u>	<u>1/2(16)</u>	<u>3/4(21)</u>	<u>1(27)</u>	<u>1 1/4(35)</u>	<u>1 1/2(41)</u>	<u>2(53)</u>	<u>2 1/2(63)</u>	<u>3(78)</u>	<u>3 1/2(91)</u>	<u>4(103)</u>	<u>5(129)</u>	<u>6(135)</u>
COMPACT CONDUCTORS														
THW,	8	1	2	4	6	10	14	25	38	55	75	98	—	—

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$ (27)	$\frac{1}{4}$ (35)	$\frac{1}{2}$ (41)	$\frac{2}{53}$ (53)	$\frac{2}{2}$ (63)	$\frac{3}{78}$ (78)	$\frac{3}{2}$ (91)	$\frac{4}{103}$ (103)	$\frac{5}{129}$ (129)	$\frac{6}{150}$ (150)
THW-2, THHW	6	1	1	3	5	7	11	20	29	43	58	76	—	—
	4	0	1	2	3	5	8	15	22	32	43	57	—	—
	2	0	1	1	2	4	6	11	16	23	32	42	—	—
	1	0	1	1	1	3	4	7	11	16	22	29	—	—
	1/0	0	1	1	1	2	3	6	10	14	19	25	—	—
	2/0	0	0	1	1	1	3	5	8	12	16	21	—	—
	3/0	0	0	1	1	1	2	4	7	10	14	18	—	—
	4/0	0	0	1	1	1	1	4	6	8	11	15	—	—
	250	0	0	0	1	1	1	3	4	7	9	12	—	—
	300	0	0	0	1	1	1	2	4	6	8	10	—	—
	350	0	0	0	1	1	1	2	3	5	7	9	—	—
	400	0	0	0	0	1	1	1	3	5	6	8	—	—
	500	0	0	0	0	1	1	1	3	4	5	7	—	—
	600	0	0	0	0	0	1	1	1	3	4	6	—	—
	700	0	0	0	0	0	1	1	1	3	4	5	—	—
	750	0	0	0	0	0	1	1	1	2	3	5	—	—
	900	0	0	0	0	0	1	1	1	2	3	4	—	—
	1000	0	0	0	0	0	0	1	1	1	3	4	—	—
THHN, THWN, THWN-2	8	—	—	—	—	—	—	—	—	—	—	—	—	—
	6	1	3	4	7	11	16	29	43	62	85	111	—	—
	4	1	1	3	4	7	10	18	27	38	52	69	—	—
	2	0	1	1	3	5	7	13	19	28	38	49	—	—
	1	0	1	1	2	3	5	9	14	21	28	37	—	—
	1/0	0	1	1	1	3	4	8	12	17	24	31	—	—
	2/0	0	1	1	1	2	4	6	10	14	20	26	—	—
	3/0	0	0	1	1	1	3	5	8	12	17	22	—	—
	4/0	0	0	1	1	1	2	4	7	10	14	18	—	—
	250	0	0	1	1	1	1	3	5	8	11	14	—	—
	300	0	0	0	1	1	1	3	5	7	9	12	—	—
	350	0	0	0	1	1	1	3	4	6	8	10	—	—
	400	0	0	0	1	1	1	2	3	5	7	9	—	—
	500	0	0	0	0	1	1	1	3	4	6	8	—	—
	600	0	0	0	0	1	1	1	2	3	5	6	—	—
	700	0	0	0	0	0	1	1	1	3	4	6	—	—
	750	0	0	0	0	0	1	1	1	3	4	5	—	—
	900	0	0	0	0	0	1	1	1	2	3	4	—	—
	1000	0	0	0	0	0	0	1	1	1	3	4	—	—
XHHW, XHHW-2	8	1	3	5	8	13	19	33	50	71	97	127	—	—
	6	1	2	4	6	9	14	24	37	53	72	95	—	—
	4	1	1	3	4	7	10	18	27	38	52	69	—	—
	2	0	1	1	3	5	7	13	19	28	38	49	—	—
	1	0	1	1	2	3	5	9	14	21	28	37	—	—
	1/0	0	1	1	1	3	4	8	12	17	24	31	—	—
	2/0	0	1	1	1	2	4	7	10	15	20	26	—	—
	3/0	0	0	1	1	1	3	5	8	12	17	22	—	—

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		-												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$ (27)	$\frac{1}{4}$ (35)	$\frac{1}{2}$ (41)	$\frac{2}{53}$ (53)	$\frac{2}{2}$ (63)	$\frac{3}{78}$ (78)	$\frac{3}{2}$ (91)	$\frac{4}{103}$ (103)	$\frac{5}{129}$ (129)	$\frac{6}{150}$ (150)
	4/0	0	0	1	1	1	2	4	7	10	14	18	—	—
	250	0	0	1	1	1	1	4	5	8	11	14	—	—
	300	0	0	0	1	1	1	3	5	7	9	12	—	—
	350	0	0	0	1	1	1	3	4	6	8	11	—	—
	400	0	0	0	1	1	1	2	4	5	7	10	—	—
	500	0	0	0	0	1	1	1	3	4	6	8	—	—
	600	0	0	0	0	1	1	1	2	3	5	6	—	—
	700	0	0	0	0	0	1	1	1	3	4	6	—	—
	750	0	0	0	0	0	1	1	1	3	4	5	—	—
	900	0	0	0	0	0	1	1	1	2	3	4	—	—
	1000	0	0	0	0	0	1	1	1	2	3	4	—	—

Definition: *Compact stranding* is the result of a manufacturing process where the stranded conductor is compressed to the extent that the interstices (voids between strand wires) are virtually eliminated.

Table C.4 Maximum Number of Conductors or Fixture Wires in Intermediate Metal Conduit (IMC) (Based on Chapter 9: Table 1, Table 4, and Table 5)

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		-												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$ (27)	$\frac{1}{4}$ (35)	$\frac{1}{2}$ (41)	$\frac{2}{53}$ (53)	$\frac{2}{2}$ (63)	$\frac{3}{78}$ (78)	$\frac{3}{2}$ (91)	$\frac{4}{103}$ (103)	$\frac{5}{129}$ (129)	$\frac{6}{150}$ (150)
CONDUCTORS														
RHH, RHW, RHW-2	14	—	4	8	13	22	30	49	70	108	144	186	—	—
	12	—	4	6	11	18	25	41	58	89	120	154	—	—
	10	—	3	5	8	15	20	33	47	72	97	124	—	—
	8	—	1	3	4	8	10	17	24	38	50	65	—	—
	6	—	1	1	3	6	8	14	19	30	40	52	—	—
	4	—	1	1	3	5	6	11	15	23	31	41	—	—
	3	—	1	1	2	4	6	9	13	21	28	36	—	—
	2	—	1	1	1	3	5	8	11	18	24	31	—	—
	1	—	0	1	1	2	3	5	7	12	16	20	—	—
	1/0	—	0	1	1	1	3	4	6	10	14	18	—	—
	2/0	—	0	1	1	1	2	4	6	9	12	15	—	—
	3/0	—	0	0	1	1	1	3	5	7	10	13	—	—
	4/0	—	0	0	1	1	1	3	4	6	9	11	—	—
	250	—	0	0	1	1	1	1	3	5	6	8	—	—
	300	—	0	0	0	1	1	1	3	4	6	7	—	—
	350	—	0	0	0	1	1	1	2	4	5	7	—	—
	400	—	0	0	0	1	1	1	2	3	5	6	—	—
	500	—	0	0	0	1	1	1	1	3	4	5	—	—
	600	—	0	0	0	0	1	1	1	2	3	4	—	—
	700	—	0	0	0	0	1	1	1	2	3	4	—	—
	750	—	0	0	0	0	1	1	1	1	3	4	—	—
	800	—	0	0	0	0	0	1	1	1	3	3	—	—
	900	—	0	0	0	0	0	1	1	1	2	3	—	—
	1000	—	0	0	0	0	0	1	1	1	2	3	—	—
	1250	—	0	0	0	0	0	1	1	1	1	1	—	—
	1500	—	0	0	0	0	0	0	1	1	1	1	—	—

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)											
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$
TW, THHW, THW, THW-2	1750	—	0	0	0	0	0	0	1	1	1	1	—
	2000	—	0	0	0	0	0	0	1	1	1	1	—
	14	—	10	17	27	47	64	104	147	228	304	392	—
	12	—	7	13	21	36	49	80	113	175	234	301	—
RHH*, RHW*, RHW-2*	10	—	5	9	15	27	36	59	84	130	174	224	—
	8	—	3	5	8	15	20	33	47	72	97	124	—
	14	—	6	11	18	31	42	69	98	151	202	261	—
	12	—	5	9	14	25	34	56	79	122	163	209	—
TW, THW, THHW, THW-2, RHH*, RHW*, RHW-2*	10	—	4	7	11	19	26	43	61	95	127	163	—
	8	—	2	4	7	12	16	26	37	57	76	98	—
	6	—	1	3	5	9	12	20	28	43	58	75	—
	4	—	1	2	4	6	9	15	21	32	43	56	—
1/0 2/0 3/0 4/0	3	—	1	1	3	6	8	13	18	28	37	48	—
	2	—	1	1	3	5	6	11	15	23	31	41	—
	1	—	1	1	1	3	4	7	11	16	22	28	—
	1	—	1	1	1	3	4	7	11	16	22	28	—
250 300 350 400 500 600 700 750 800 900 1000 1250 1500 1750 2000	1/0	—	1	1	1	3	4	6	9	14	19	24	—
	2/0	—	0	1	1	2	3	5	8	12	16	20	—
	3/0	—	0	1	1	1	3	4	6	10	13	17	—
	4/0	—	0	1	1	1	2	4	5	8	11	14	—
THHN, THWN, THWN-2	250	—	0	0	1	1	1	3	4	7	9	12	—
	300	—	0	0	1	1	1	2	4	6	8	10	—
	350	—	0	0	1	1	1	2	3	5	7	9	—
	400	—	0	0	0	1	1	1	3	4	6	8	—
1/0 2/0	500	—	0	0	0	1	1	1	2	4	5	7	—
	600	—	0	0	0	1	1	1	1	3	4	5	—
	700	—	0	0	0	0	1	1	1	3	4	5	—
	750	—	0	0	0	0	1	1	1	2	3	4	—
1/0 2/0	800	—	0	0	0	0	1	1	1	2	3	4	—
	900	—	0	0	0	0	1	1	1	2	3	4	—
	1000	—	0	0	0	0	0	1	1	1	3	3	—
	1250	—	0	0	0	0	0	1	1	1	1	3	—
1/0 2/0	1500	—	0	0	0	0	0	1	1	1	1	2	—
	1750	—	0	0	0	0	0	0	1	1	1	1	—
	2000	—	0	0	0	0	0	0	1	1	1	1	—
	14	—	14	24	39	68	91	149	211	326	436	562	—
1/0 2/0	12	—	10	17	29	49	67	109	154	238	318	410	—
	10	—	6	11	18	31	42	69	97	150	200	258	—
	8	—	3	6	10	18	24	39	56	86	115	149	—
	6	—	2	4	7	13	17	28	40	62	83	107	—
1/0 2/0	4	—	1	3	4	8	11	17	25	38	51	66	—
	3	—	1	2	4	6	9	15	21	32	43	56	—
	2	—	1	1	3	5	7	12	17	27	36	47	—
	1	—	1	1	2	4	5	9	13	20	27	35	—
1/0 2/0	1/0	—	1	1	1	3	4	8	11	17	23	29	—
	2/0	—	1	1	1	3	4	6	9	14	19	24	—

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)											
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$
	3/0	—	0	1	1	2	3	5	7	12	16	20	—
	4/0	—	0	1	1	1	2	4	6	9	13	17	—
	250	—	0	0	1	1	1	3	5	8	10	13	—
	300	—	0	0	1	1	1	3	4	7	9	12	—
	350	—	0	0	1	1	1	2	4	6	8	10	—
	400	—	0	0	1	1	1	2	3	5	7	9	—
	500	—	0	0	0	1	1	1	3	4	6	7	—
	600	—	0	0	0	1	1	1	2	3	5	6	—
	700	—	0	0	0	1	1	1	1	3	4	5	—
	750	—	0	0	0	1	1	1	1	3	4	5	—
	800	—	0	0	0	0	1	1	1	3	4	5	—
	900	—	0	0	0	0	1	1	1	2	3	4	—
	1000	—	0	0	0	0	1	1	1	2	3	4	—
FEP, FEPB, PFA, PFAH, TFE	14	—	13	23	38	66	89	145	205	317	423	545	—
	12	—	10	17	28	48	65	106	150	231	309	398	—
	10	—	7	12	20	34	46	76	107	166	221	285	—
	8	—	4	7	11	19	26	43	61	95	127	163	—
	6	—	3	5	8	14	19	31	44	67	90	116	—
	4	—	1	3	5	10	13	21	30	47	63	81	—
	3	—	1	3	4	8	11	18	25	39	52	68	—
	2	—	1	2	4	6	9	15	21	32	43	56	—
PFA, PFAH, TFE	1	—	1	1	2	4	6	10	14	22	30	39	—
PFA, PFAH, TFE, Z	1/0	—	1	1	1	4	5	8	12	19	25	32	—
	2/0	—	1	1	1	3	4	7	10	15	21	27	—
	3/0	—	0	1	1	2	3	6	8	13	17	22	—
	4/0	—	0	1	1	1	3	5	7	10	14	18	—
Z	14	—	16	28	46	79	107	175	247	381	510	657	—
	12	—	11	20	32	56	76	124	175	271	362	466	—
	10	—	7	12	20	34	46	76	107	166	221	285	—
	8	—	4	7	12	22	29	48	68	105	140	180	—
	6	—	3	5	9	15	20	33	47	73	98	127	—
	4	—	1	3	6	10	14	23	33	50	67	87	—
	3	—	1	2	4	7	10	17	24	37	49	63	—
	2	—	1	1	3	6	8	14	20	30	41	53	—
	1	—	1	1	3	5	7	11	16	25	33	43	—
XHHW, ZW, XHHW-2, XHH	14	—	10	17	27	47	64	104	147	228	304	392	—
	12	—	7	13	21	36	49	80	113	175	234	301	—
	10	—	5	9	15	27	36	59	84	130	174	224	—
	8	—	3	5	8	15	20	33	47	72	97	124	—
	6	—	1	4	6	11	15	24	35	53	71	92	—
	4	—	1	3	4	8	11	18	25	39	52	67	—
	3	—	1	2	4	7	9	15	21	33	44	56	—
	2	—	1	1	3	5	7	12	18	27	37	47	—
XHHW,	1	—	1	1	2	4	6	9	13	20	27	35	—

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)											
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$
XHHW-2, XHH	1/0	—	1	1	1	3	5	8	11	17	23	30	—
	2/0	—	1	1	1	3	4	6	9	14	19	25	—
	3/0	—	0	1	1	2	3	5	7	12	16	20	—
	4/0	—	0	1	1	1	2	4	6	10	13	17	—
	250	—	0	0	1	1	1	3	5	8	11	14	—
	300	—	0	0	1	1	1	3	4	7	9	12	—
	350	—	0	0	1	1	1	3	4	6	8	10	—
	400	—	0	0	1	1	1	2	3	5	7	9	—
	500	—	0	0	0	1	1	1	3	4	6	8	—
	600	—	0	0	0	1	1	1	2	3	5	6	—
	700	—	0	0	0	1	1	1	1	3	4	5	—
	750	—	0	0	0	1	1	1	1	3	4	5	—
	800	—	0	0	0	0	1	1	1	3	4	5	—
	900	—	0	0	0	0	1	1	1	2	3	4	—
	1000	—	0	0	0	0	1	1	1	2	3	4	—
	1250	—	0	0	0	0	0	1	1	1	2	3	—
	1500	—	0	0	0	0	0	1	1	1	1	2	—
	1750	—	0	0	0	0	0	1	1	1	1	2	—
	2000	—	0	0	0	0	0	0	1	1	1	1	—
FIXTURE WIRES													
RFH-2, FFH-2, RFHH-2	18	—	9	16	26	45	61	100	141	218	292	376	—
	16	—	8	13	22	38	51	84	119	184	246	317	—
SF-2, SFF-2	18	—	12	20	33	57	77	126	178	275	368	474	—
	16	—	10	17	27	47	64	104	147	228	304	392	—
	14	—	8	13	22	38	51	84	119	184	246	317	—
SF-1, SFF-1	18	—	21	36	59	101	137	223	316	487	651	839	—
RFH-1, TF, TFF, XF, XFF	18	—	15	26	43	75	101	165	233	360	481	619	—
	16	—	12	21	35	60	81	133	188	290	388	500	—
XF, XFF	14	—	10	17	27	47	64	104	147	228	304	392	—
TFN, TFFN	18	—	25	42	69	119	162	264	373	576	769	991	—
	16	—	19	32	53	91	123	201	285	440	588	757	—
PF, PFF, PGF, PGFF, PAF, PTF, PTFF, PAFF	18	—	23	40	66	113	153	250	354	546	730	940	—
	16	—	18	31	51	88	118	193	274	422	564	727	—
	14	—	13	23	38	66	89	145	205	317	423	545	—
ZF, ZFF, ZHF	18	—	30	52	85	146	197	322	456	704	941	1211	—
	16	—	22	38	63	108	146	238	336	519	694	894	—
	14	—	16	28	46	79	107	175	247	381	510	657	—
KF-2, KFF-2	18	—	45	78	128	219	296	484	684	1056	1411	1817	—
	16	—	32	54	89	153	207	337	477	737	984	1268	—

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)											
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$
KF-1, KFF-1	14	—	21	36	60	103	139	227	321	495	661	852	—
	12	—	15	25	41	71	96	158	223	344	460	592	—
	10	—	10	17	27	47	64	104	147	228	304	392	—
	18	—	52	90	147	253	342	558	790	1218	1628	2097	—
	16	—	37	63	103	178	240	392	555	856	1144	1473	—
XF, XFF	14	—	25	42	69	119	162	264	373	576	769	991	—
	12	—	16	28	46	79	107	175	247	381	510	657	—
	10	—	10	18	30	52	70	114	161	249	333	429	—
	12	—	5	9	14	25	34	56	79	122	163	209	—
	10	—	4	7	11	19	26	43	61	95	127	163	—

Notes:

1. This table is for concentric stranded conductors only. For compact stranded conductors, Table C.4(A) should be used.
2. Two-hour fire-rated RHH cable has ceramifiable insulation, which has much larger diameters than other RHH wires. Consult manufacturer's conduit fill tables.

*Types RHH, RHW, and RHW-2 without outer covering.

Table C.4(A) Maximum Number of Conductors or Fixture Wires in Intermediate Metal Conduit (IMC)
(Based on Chapter 9: Table 1, Table 4, and Table 5A)

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$	$\frac{1}{16}$
COMPACT CONDUCTORS														
THW, THW-2, THHW	8	—	2	4	7	13	17	28	40	62	83	107	—	—
	6	—	1	3	6	10	13	22	31	48	64	82	—	—
	4	—	1	2	4	7	10	16	23	36	48	62	—	—
	2	—	1	1	3	5	7	12	17	26	35	45	—	—
	1	—	1	1	1	4	5	8	12	18	25	32	—	—
	1/0	—	1	1	1	3	4	7	10	16	21	27	—	—
	2/0	—	0	1	1	3	4	6	9	13	18	23	—	—
	3/0	—	0	1	1	2	3	5	7	11	15	20	—	—
	4/0	—	0	1	1	1	2	4	6	9	13	16	—	—
	250	—	0	0	1	1	1	3	5	7	10	13	—	—
	300	—	0	0	1	1	1	3	4	6	9	11	—	—
	350	—	0	0	1	1	1	2	4	6	8	10	—	—
	400	—	0	0	1	1	1	2	3	5	7	9	—	—
	500	—	0	0	0	1	1	1	3	4	6	8	—	—
	600	—	0	0	0	1	1	1	2	3	5	6	—	—
	700	—	0	0	0	1	1	1	1	3	4	5	—	—
	750	—	0	0	0	1	1	1	1	3	4	5	—	—
	900	—	0	0	0	0	1	1	1	2	3	4	—	—
	1000	—	0	0	0	0	1	1	1	2	3	4	—	—
THHN, THWN, THWN-2	8	—	—	—	—	—	—	—	—	—	—	—	—	—
	6	—	3	5	8	14	19	32	45	70	93	120	—	—
	4	—	1	3	5	9	12	20	28	43	58	74	—	—

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)													
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$ (27)	$\frac{1}{4}$ (35)	$\frac{1}{2}$ (41)	$\frac{2}{53}$ (53)	$\frac{2}{2}$ (63)	$\frac{3}{78}$ (78)	$\frac{3}{2}$ (91)	$\frac{4}{103}$ (103)	$\frac{5}{129}$ (129)	$\frac{6}{141}$ (141)	
XHHW, XHHW-2	2	—	1	1	3	6	8	14	20	31	41	53	—	—	
	1	—	1	1	3	5	6	10	15	23	31	40	—	—	
	1/0	—	1	1	2	4	5	9	13	20	26	34	—	—	
	2/0	—	1	1	1	3	4	7	10	16	22	28	—	—	
	3/0	—	0	1	1	3	4	6	9	14	18	24	—	—	
	4/0	—	0	1	1	2	3	5	7	11	15	19	—	—	
	250	—	0	1	1	1	2	4	6	9	12	15	—	—	
	300	—	0	0	1	1	1	3	5	7	10	13	—	—	
	350	—	0	0	1	1	1	3	4	7	9	11	—	—	
	400	—	0	0	1	1	1	2	4	6	8	10	—	—	
	500	—	0	0	1	1	1	2	3	5	7	9	—	—	
	600	—	0	0	0	1	1	1	2	4	5	7	—	—	
	700	—	0	0	0	1	1	1	2	3	5	6	—	—	
	750	—	0	0	0	1	1	1	1	3	4	6	—	—	
	900	—	0	0	0	0	1	1	1	3	3	5	—	—	
	1000	—	0	0	0	0	1	1	1	2	3	4	—	—	
	8	—	3	6	9	16	22	37	52	80	107	138	—	—	
	6	—	2	4	7	12	16	27	38	59	80	103	—	—	
	4	—	1	3	5	9	12	20	28	43	58	74	—	—	
	2	—	1	1	3	6	8	14	20	31	41	53	—	—	
1	—	1	1	3	5	6	10	15	23	31	40	—	—		
1/0	—	1	1	2	4	5	9	13	20	26	34	—	—		
2/0	—	1	1	1	3	4	7	11	17	22	29	—	—		
3/0	—	0	1	1	3	4	6	9	14	18	24	—	—		
4/0	—	0	1	1	2	3	5	7	11	15	20	—	—		
250	—	0	1	1	1	2	4	6	9	12	16	—	—		
300	—	0	0	1	1	1	3	5	8	10	13	—	—		
350	—	0	0	1	1	1	3	4	7	9	12	—	—		
400	—	0	0	1	1	1	3	4	6	8	11	—	—		
500	—	0	0	1	1	1	2	3	5	7	9	—	—		
600	—	0	0	0	1	1	1	2	4	5	7	—	—		
700	—	0	0	0	1	1	1	2	3	5	6	—	—		
750	—	0	0	0	1	1	1	1	3	4	6	—	—		
900	—	0	0	0	1	1	1	1	3	4	5	—	—		
1000	—	0	0	0	0	1	1	1	2	3	4	—	—		

Definition: *Compact stranding* is the result of a manufacturing process where the stranded conductor is compressed to the extent that interstices (voids between strand wires) are virtually eliminated.

Table C.5 Maximum Number of Conductors or Fixture Wires in Liquidtight Flexible Nonmetallic Conduit (Type LFNC-A) (Based on Chapter 9: Table 1, Table 4, and Table 5)

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)													
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$ (27)	$\frac{1}{4}$ (35)	$\frac{1}{2}$ (41)	$\frac{2}{53}$ (53)	$\frac{2}{2}$ (63)	$\frac{3}{78}$ (78)	$\frac{3}{2}$ (91)	$\frac{4}{103}$ (103)	$\frac{5}{129}$ (129)	$\frac{6}{141}$ (141)	
		CONDUCTORS													
RHH, RHW,	14	2	4	7	11	20	27	45	—	—	—	—	—	—	
	12	1	3	6	9	17	23	38	—	—	—	—	—	—	

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)											
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$ (1
RHW-2	10	1	3	5	8	13	18	30	—	—	—	—	—
	8	1	1	2	4	7	9	16	—	—	—	—	—
	6	1	1	1	3	5	7	13	—	—	—	—	—
	4	0	1	1	2	4	6	10	—	—	—	—	—
	3	0	1	1	1	4	5	8	—	—	—	—	—
	2	0	1	1	1	3	4	7	—	—	—	—	—
	1	0	0	1	1	1	3	5	—	—	—	—	—
	1/0	0	0	1	1	1	2	4	—	—	—	—	—
	2/0	0	0	1	1	1	1	4	—	—	—	—	—
	3/0	0	0	0	1	1	1	3	—	—	—	—	—
	4/0	0	0	0	1	1	1	3	—	—	—	—	—
	250	0	0	0	0	1	1	1	—	—	—	—	—
	300	0	0	0	0	1	1	1	—	—	—	—	—
	350	0	0	0	0	1	1	1	—	—	—	—	—
	400	0	0	0	0	1	1	1	—	—	—	—	—
	500	0	0	0	0	0	1	1	—	—	—	—	—
	600	0	0	0	0	0	1	1	—	—	—	—	—
	700	0	0	0	0	0	0	1	—	—	—	—	—
	750	0	0	0	0	0	0	1	—	—	—	—	—
	800	0	0	0	0	0	0	1	—	—	—	—	—
	900	0	0	0	0	0	0	1	—	—	—	—	—
	1000	0	0	0	0	0	0	1	—	—	—	—	—
	1250	0	0	0	0	0	0	0	—	—	—	—	—
	1500	0	0	0	0	0	0	0	—	—	—	—	—
	1750	0	0	0	0	0	0	0	—	—	—	—	—
	2000	0	0	0	0	0	0	0	—	—	—	—	—
TW, THHW, THW, THW-2	14	5	9	15	24	43	58	96	—	—	—	—	—
	12	4	7	12	19	33	44	74	—	—	—	—	—
	10	3	5	9	14	24	33	55	—	—	—	—	—
	8	1	3	5	8	13	18	30	—	—	—	—	—
RHH*, RHW*, RHW-2*	14	3	6	10	16	28	38	64	—	—	—	—	—
	12	3	5	8	13	23	31	51	—	—	—	—	—
	10	1	3	6	10	18	24	40	—	—	—	—	—
	8	1	1	4	6	11	14	24	—	—	—	—	—
TW, THW, THHW, THW-2, RHH*, RHW*, RHW-2*	6	1	1	3	4	8	11	18	—	—	—	—	—
	4	1	1	1	3	6	8	13	—	—	—	—	—
	3	1	1	1	3	5	7	11	—	—	—	—	—
	2	0	1	1	2	4	6	10	—	—	—	—	—
	1	0	1	1	1	3	4	7	—	—	—	—	—
	1/0	0	0	1	1	2	3	6	—	—	—	—	—
	2/0	0	0	1	1	1	3	5	—	—	—	—	—
	3/0	0	0	1	1	1	2	4	—	—	—	—	—
	4/0	0	0	0	1	1	1	3	—	—	—	—	—
	250	0	0	0	1	1	1	3	—	—	—	—	—
	300	0	0	0	1	1	1	2	—	—	—	—	—

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)													
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$ (27)	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$ (53)	$2\frac{1}{2}$ (63)	$\frac{3}{78}$ (78)	$3\frac{1}{2}$ (91)	$\frac{4}{103}$ (103)	$\frac{5}{129}$ (129)	$\frac{1}{16}$ (16)	
	350	0	0	0	0	1	1	1	—	—	—	—	—	—	
	400	0	0	0	0	1	1	1	—	—	—	—	—	—	
	500	0	0	0	0	1	1	1	—	—	—	—	—	—	
	600	0	0	0	0	1	1	1	—	—	—	—	—	—	
	700	0	0	0	0	0	1	1	—	—	—	—	—	—	
	750	0	0	0	0	0	1	1	—	—	—	—	—	—	
	800	0	0	0	0	0	1	1	—	—	—	—	—	—	
	900	0	0	0	0	0	0	1	—	—	—	—	—	—	
	1000	0	0	0	0	0	0	1	—	—	—	—	—	—	
	1250	0	0	0	0	0	0	1	—	—	—	—	—	—	
	1500	0	0	0	0	0	0	1	—	—	—	—	—	—	
	1750	0	0	0	0	0	0	0	—	—	—	—	—	—	
	2000	0	0	0	0	0	0	0	—	—	—	—	—	—	
	THHN, THWN, THWN-2	14	8	13	22	35	62	83	138	—	—	—	—	—	—
		12	5	9	16	25	45	60	100	—	—	—	—	—	—
		10	3	6	10	16	28	38	63	—	—	—	—	—	—
8		1	3	6	9	16	22	36	—	—	—	—	—	—	
6		1	2	4	6	12	16	26	—	—	—	—	—	—	
4		1	1	2	4	7	9	16	—	—	—	—	—	—	
3		1	1	1	3	6	8	13	—	—	—	—	—	—	
2		1	1	1	3	5	7	11	—	—	—	—	—	—	
1		0	1	1	1	4	5	8	—	—	—	—	—	—	
1/0		0	1	1	1	3	4	7	—	—	—	—	—	—	
2/0		0	0	1	1	2	3	6	—	—	—	—	—	—	
3/0		0	0	1	1	1	3	5	—	—	—	—	—	—	
4/0		0	0	1	1	1	2	4	—	—	—	—	—	—	
250		0	0	0	1	1	1	3	—	—	—	—	—	—	
300		0	0	0	1	1	1	3	—	—	—	—	—	—	
350		0	0	0	1	1	1	2	—	—	—	—	—	—	
400	0	0	0	0	1	1	1	—	—	—	—	—	—		
500	0	0	0	0	1	1	1	—	—	—	—	—	—		
600	0	0	0	0	1	1	1	—	—	—	—	—	—		
700	0	0	0	0	1	1	1	—	—	—	—	—	—		
750	0	0	0	0	0	1	1	—	—	—	—	—	—		
800	0	0	0	0	0	1	1	—	—	—	—	—	—		
900	0	0	0	0	0	1	1	—	—	—	—	—	—		
1000	0	0	0	0	0	0	1	—	—	—	—	—	—		
FEP, FEPB, PFA, PFAH, TFE	14	7	12	21	34	60	80	133	—	—	—	—	—	—	
	12	5	9	15	25	44	59	97	—	—	—	—	—	—	
	10	4	6	11	18	31	42	70	—	—	—	—	—	—	
	8	1	3	6	10	18	24	40	—	—	—	—	—	—	
	6	1	2	4	7	13	17	28	—	—	—	—	—	—	
	4	1	1	3	5	9	12	20	—	—	—	—	—	—	
	3	1	1	2	4	7	10	16	—	—	—	—	—	—	
	2	1	1	1	3	6	8	13	—	—	—	—	—	—	

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$ (27)	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$ (53)	$2\frac{1}{2}$ (63)	$\frac{3}{78}$ (78)	$3\frac{1}{2}$ (91)	$\frac{4}{103}$ (103)	$\frac{5}{129}$ (129)	(1)
PFA, PFAH, TFE	1	0	1	1	2	4	5	9	—	—	—	—	—	—
PFA, PFAH, TFE, Z	1/0	0	1	1	1	3	5	8	—	—	—	—	—	—
	2/0	0	1	1	1	3	4	6	—	—	—	—	—	—
	3/0	0	0	1	1	2	3	5	—	—	—	—	—	—
	4/0	0	0	1	1	1	2	4	—	—	—	—	—	—
Z	14	9	15	25	41	72	97	161	—	—	—	—	—	—
	12	6	10	18	29	51	69	114	—	—	—	—	—	—
	10	4	6	11	18	31	42	70	—	—	—	—	—	—
	8	2	4	7	11	20	26	44	—	—	—	—	—	—
	6	1	3	5	8	14	18	31	—	—	—	—	—	—
	4	1	1	3	5	9	13	21	—	—	—	—	—	—
	3	1	1	2	4	7	9	15	—	—	—	—	—	—
	2	1	1	1	3	6	8	13	—	—	—	—	—	—
	1	1	1	1	2	4	6	10	—	—	—	—	—	—
	14	5	9	15	24	43	58	96	—	—	—	—	—	—
XHHW, ZW, XHHW-2, XHH	12	4	7	12	19	33	44	74	—	—	—	—	—	—
	10	3	5	9	14	24	33	55	—	—	—	—	—	—
	8	1	3	5	8	13	18	30	—	—	—	—	—	—
	6	1	1	3	5	10	13	22	—	—	—	—	—	—
	4	1	1	2	4	7	10	16	—	—	—	—	—	—
	3	1	1	1	3	6	8	14	—	—	—	—	—	—
	2	1	1	1	3	5	7	11	—	—	—	—	—	—
	1	0	1	1	1	4	5	8	—	—	—	—	—	—
	1/0	0	1	1	1	3	4	7	—	—	—	—	—	—
	2/0	0	0	1	1	2	3	6	—	—	—	—	—	—
XHHW, XHHW-2, XHH	3/0	0	0	1	1	1	3	5	—	—	—	—	—	—
	4/0	0	0	1	1	1	2	4	—	—	—	—	—	—
	250	0	0	0	1	1	1	3	—	—	—	—	—	—
	300	0	0	0	1	1	1	3	—	—	—	—	—	—
	350	0	0	0	1	1	1	2	—	—	—	—	—	—
	400	0	0	0	0	1	1	1	—	—	—	—	—	—
	500	0	0	0	0	1	1	1	—	—	—	—	—	—
	600	0	0	0	0	1	1	1	—	—	—	—	—	—
	700	0	0	0	0	1	1	1	—	—	—	—	—	—
	750	0	0	0	0	0	1	1	—	—	—	—	—	—
	800	0	0	0	0	0	1	1	—	—	—	—	—	—
	900	0	0	0	0	0	1	1	—	—	—	—	—	—
	1000	0	0	0	0	0	0	1	—	—	—	—	—	—
	1250	0	0	0	0	0	0	1	—	—	—	—	—	—
	1500	0	0	0	0	0	0	1	—	—	—	—	—	—
	1750	0	0	0	0	0	0	0	—	—	—	—	—	—
	2000	0	0	0	0	0	0	0	—	—	—	—	—	—
FIXTURE WIRES														
RFH-2,	18	5	8	14	23	41	55	92	—	—	—	—	—	—

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$	(1
FFH-2, RFHH-2	16	4	7	12	20	35	47	77	—	—	—	—	—	—
SF-2, SFF-2	18	6	11	18	29	52	70	116	—	—	—	—	—	—
	16	5	9	15	24	43	58	96	—	—	—	—	—	—
	14	4	7	12	20	35	47	77	—	—	—	—	—	—
SF-1, SFF-1	18	12	19	33	52	92	124	205	—	—	—	—	—	—
RFH-1, TF, TFF, XF, XFF	18	8	14	24	39	68	91	152	—	—	—	—	—	—
	16	7	11	19	31	55	74	122	—	—	—	—	—	—
XF, XFF	14	5	9	15	24	43	58	96	—	—	—	—	—	—
TFN, TFFN	18	14	22	39	62	109	146	243	—	—	—	—	—	—
	16	10	17	29	47	83	112	185	—	—	—	—	—	—
PF, PFF, PGF, PGFF, PAF, PTF, PTFF, PAFF	18	13	21	37	59	103	139	230	—	—	—	—	—	—
	16	10	16	28	45	80	107	178	—	—	—	—	—	—
	14	7	12	21	34	60	80	133	—	—	—	—	—	—
ZF, ZFF, ZHF	18	17	27	47	76	133	179	297	—	—	—	—	—	—
	16	12	20	35	56	98	132	219	—	—	—	—	—	—
	14	9	15	25	41	72	97	161	—	—	—	—	—	—
KF-2, KFF-2	18	25	41	71	114	200	269	445	—	—	—	—	—	—
	16	18	29	49	79	139	187	311	—	—	—	—	—	—
	14	12	19	33	53	94	126	209	—	—	—	—	—	—
	12	8	13	23	37	65	87	145	—	—	—	—	—	—
	10	5	9	15	24	43	58	96	—	—	—	—	—	—
KF-1, KFF-1	18	29	48	82	131	231	310	514	—	—	—	—	—	—
	16	20	33	58	92	162	218	361	—	—	—	—	—	—
	14	14	22	39	62	109	146	243	—	—	—	—	—	—
	12	9	15	25	41	72	97	161	—	—	—	—	—	—
	10	6	10	17	27	47	63	105	—	—	—	—	—	—
XF, XFF	12	3	5	8	13	23	31	51	—	—	—	—	—	—
	10	1	3	6	10	18	24	40	—	—	—	—	—	—

Notes:

1. This table is for concentric stranded conductors only. For compact stranded conductors, Table C.6(A) should be used.
2. Two-hour fire-rated RHH cable has ceramifiable insulation, which has much larger diameters than other RHH wires. Consult manufacturer's conduit fill tables.

*Types RHH, RHW, and RHW-2 without outer covering.

Table C.5(A) Maximum Number of Conductors or Fixture Wires in Liquidtight Flexible Nonmetallic Conduit (Type LFNC-A) (Based on Chapter 9: Table 1, Table 4, and Table 5A)

Type	Conductor	Trade Size (Metric Designator)												
------	-----------	--------------------------------	--	--	--	--	--	--	--	--	--	--	--	--

	Size (AWG/ kcmil)													
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$ (27)	$\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$ (53)	$2\frac{1}{2}$ (63)	$\frac{3}{78}$ (78)	$3\frac{1}{2}$ (91)	$\frac{4}{103}$ (103)	$\frac{5}{129}$ (129)	(1)
COMPACT CONDUCTORS														
THW, THW-2, THHW	8	1	2	4	6	11	16	26	—	—	—	—	—	—
	6	1	1	3	5	9	12	20	—	—	—	—	—	—
	4	1	1	2	4	7	9	15	—	—	—	—	—	—
	2	1	1	1	3	5	6	11	—	—	—	—	—	—
	1	0	1	1	1	3	4	8	—	—	—	—	—	—
	1/0	0	1	1	1	3	4	7	—	—	—	—	—	—
	2/0	0	0	1	1	2	3	5	—	—	—	—	—	—
	3/0	0	0	1	1	1	3	5	—	—	—	—	—	—
	4/0	0	0	1	1	1	2	4	—	—	—	—	—	—
	250	0	0	0	1	1	1	3	—	—	—	—	—	—
	300	0	0	0	1	1	1	3	—	—	—	—	—	—
	350	0	0	0	1	1	1	2	—	—	—	—	—	—
	400	0	0	0	0	1	1	1	—	—	—	—	—	—
	500	0	0	0	0	1	1	1	—	—	—	—	—	—
	600	0	0	0	0	1	1	1	—	—	—	—	—	—
	700	0	0	0	0	1	1	1	—	—	—	—	—	—
	750	0	0	0	0	0	1	1	—	—	—	—	—	—
	900	0	0	0	0	0	1	1	—	—	—	—	—	—
	1000	0	0	0	0	0	1	1	—	—	—	—	—	—
THHN, THWN, THWN-2	8	—	—	—	—	—	—	—	—	—	—	—	—	—
	6	1	2	4	7	13	18	29	—	—	—	—	—	—
	4	1	1	3	4	8	11	18	—	—	—	—	—	—
	2	1	1	1	3	6	8	13	—	—	—	—	—	—
	1	0	1	1	2	4	6	10	—	—	—	—	—	—
	1/0	0	1	1	1	3	5	8	—	—	—	—	—	—
	2/0	0	1	1	1	3	4	7	—	—	—	—	—	—
	3/0	0	0	1	1	2	3	6	—	—	—	—	—	—
	4/0	0	0	1	1	1	3	5	—	—	—	—	—	—
	250	0	0	1	1	1	1	3	—	—	—	—	—	—
	300	0	0	0	1	1	1	3	—	—	—	—	—	—
	350	0	0	0	1	1	1	3	—	—	—	—	—	—
	400	0	0	0	1	1	1	2	—	—	—	—	—	—
	500	0	0	0	0	1	1	1	—	—	—	—	—	—
	600	0	0	0	0	1	1	1	—	—	—	—	—	—
	700	0	0	0	0	1	1	1	—	—	—	—	—	—
	750	0	0	0	0	1	1	1	—	—	—	—	—	—
	900	0	0	0	0	0	1	1	—	—	—	—	—	—
	1000	0	0	0	0	0	1	1	—	—	—	—	—	—
XHHW, XHHW-2	8	1	3	5	8	15	20	34	—	—	—	—	—	—
	6	1	2	4	6	11	15	25	—	—	—	—	—	—
	4	1	1	3	4	8	11	18	—	—	—	—	—	—
	2	1	1	1	3	6	8	13	—	—	—	—	—	—
	1	0	1	1	2	4	6	10	—	—	—	—	—	—
	1/0	0	1	1	1	3	5	8	—	—	—	—	—	—
	2/0	0	1	1	1	3	4	7	—	—	—	—	—	—

3/0	0	0	1	1	2	3	6	—	—	—	—	—	—
4/0	0	0	1	1	1	3	5	—	—	—	—	—	—
250	0	0	1	1	1	2	4	—	—	—	—	—	—
300	0	0	0	1	1	1	3	—	—	—	—	—	—
350	0	0	0	1	1	1	3	—	—	—	—	—	—
400	0	0	0	1	1	1	2	—	—	—	—	—	—
500	0	0	0	0	1	1	1	—	—	—	—	—	—
600	0	0	0	0	1	1	1	—	—	—	—	—	—
700	0	0	0	0	1	1	1	—	—	—	—	—	—
750	0	0	0	0	1	1	1	—	—	—	—	—	—
900	0	0	0	0	0	1	1	—	—	—	—	—	—
1000	0	0	0	0	0	1	1	—	—	—	—	—	—

Definition: *Compact stranding* is the result of a manufacturing process where the stranded conductor is compressed to the extent that the interstices (voids between strand wires) are virtually eliminated.

Table C.6 Maximum Number of Conductors or Fixture Wires in Liquidtight Flexible Nonmetallic Conduit (Type LFNC-B*) (Based on Chapter 9: Table 1, Table 4, and Table 5)

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$\frac{1}{4}$ (35)	$\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$	$\frac{6}{150}$
CONDUCTORS														
RHH, RHW, RHW-2	14	2	4	7	12	21	27	44	—	—	—	—	—	—
	12	1	3	6	10	17	22	36	—	—	—	—	—	—
	10	1	3	5	8	14	18	29	—	—	—	—	—	—
	8	1	1	2	4	7	9	15	—	—	—	—	—	—
	6	1	1	1	3	6	7	12	—	—	—	—	—	—
	4	0	1	1	2	4	6	9	—	—	—	—	—	—
	3	0	1	1	1	4	5	8	—	—	—	—	—	—
	2	0	1	1	1	3	4	7	—	—	—	—	—	—
	1	0	0	1	1	1	3	5	—	—	—	—	—	—
	1/0	0	0	1	1	1	2	4	—	—	—	—	—	—
	2/0	0	0	1	1	1	1	3	—	—	—	—	—	—
	3/0	0	0	0	1	1	1	3	—	—	—	—	—	—
	4/0	0	0	0	1	1	1	2	—	—	—	—	—	—
	250	0	0	0	0	1	1	1	—	—	—	—	—	—
	300	0	0	0	0	1	1	1	—	—	—	—	—	—
	350	0	0	0	0	1	1	1	—	—	—	—	—	—
	400	0	0	0	0	1	1	1	—	—	—	—	—	—
	500	0	0	0	0	1	1	1	—	—	—	—	—	—
	600	0	0	0	0	0	1	1	—	—	—	—	—	—
	700	0	0	0	0	0	0	1	—	—	—	—	—	—
	750	0	0	0	0	0	0	1	—	—	—	—	—	—
	800	0	0	0	0	0	0	1	—	—	—	—	—	—
	900	0	0	0	0	0	0	1	—	—	—	—	—	—
	1000	0	0	0	0	0	0	1	—	—	—	—	—	—
	1250	0	0	0	0	0	0	0	—	—	—	—	—	—
	1500	0	0	0	0	0	0	0	—	—	—	—	—	—
	1750	0	0	0	0	0	0	0	—	—	—	—	—	—
	2000	0	0	0	0	0	0	0	—	—	—	—	—	—
TW, THHW, THW, THW-2	14	5	9	15	25	44	57	93	—	—	—	—	—	—
	12	4	7	12	19	33	43	71	—	—	—	—	—	—
	10	3	5	9	14	25	32	53	—	—	—	—	—	—
	8	1	3	5	8	14	18	29	—	—	—	—	—	—
RHH*, RHW*, RHW-2*	14	3	6	10	16	29	38	62	—	—	—	—	—	—
	12	3	5	8	13	23	30	50	—	—	—	—	—	—
	10	1	3	6	10	18	23	39	—	—	—	—	—	—
	8	1	1	4	6	11	14	23	—	—	—	—	—	—
TW, THW, THHW, THW-2, RHH*, RHW*, RHW-2*	6	1	1	3	5	8	11	18	—	—	—	—	—	—
	4	1	1	1	3	6	8	13	—	—	—	—	—	—
	3	1	1	1	3	5	7	11	—	—	—	—	—	—
	2	0	1	1	2	4	6	9	—	—	—	—	—	—
	1	0	1	1	1	3	4	7	—	—	—	—	—	—
	1/0	0	0	1	1	2	3	6	—	—	—	—	—	—
	2/0	0	0	1	1	2	3	5	—	—	—	—	—	—
	3/0	0	0	1	1	1	2	4	—	—	—	—	—	—

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)													
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$ (27)	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$ (53)	$2\frac{1}{2}$ (63)	$\frac{3}{78}$ (78)	$3\frac{1}{2}$ (91)	$\frac{4}{103}$ (103)	$\frac{5}{129}$ (129)	$\frac{6}{152}$ (152)	
	4/0	0	0	0	1	1	1	3	—	—	—	—	—	—	
	250	0	0	0	1	1	1	3	—	—	—	—	—	—	
	300	0	0	0	1	1	1	2	—	—	—	—	—	—	
	350	0	0	0	0	1	1	1	—	—	—	—	—	—	
	400	0	0	0	0	1	1	1	—	—	—	—	—	—	
	500	0	0	0	0	1	1	1	—	—	—	—	—	—	
	600	0	0	0	0	1	1	1	—	—	—	—	—	—	
	700	0	0	0	0	0	1	1	—	—	—	—	—	—	
	750	0	0	0	0	0	1	1	—	—	—	—	—	—	
	800	0	0	0	0	0	1	1	—	—	—	—	—	—	
	900	0	0	0	0	0	0	1	—	—	—	—	—	—	
	1000	0	0	0	0	0	0	1	—	—	—	—	—	—	
	1250	0	0	0	0	0	0	1	—	—	—	—	—	—	
	1500	0	0	0	0	0	0	0	—	—	—	—	—	—	
	1750	0	0	0	0	0	0	0	—	—	—	—	—	—	
	2000	0	0	0	0	0	0	0	—	—	—	—	—	—	
	THHN, THWN, THWN-2	14	8	13	22	36	63	81	134	—	—	—	—	—	—
		12	5	9	16	26	46	59	97	—	—	—	—	—	—
		10	3	6	10	16	29	37	61	—	—	—	—	—	—
		8	1	3	6	9	16	21	35	—	—	—	—	—	—
		6	1	2	4	7	12	15	25	—	—	—	—	—	—
4		1	1	2	4	7	9	15	—	—	—	—	—	—	
3		1	1	1	3	6	8	13	—	—	—	—	—	—	
2		1	1	1	3	5	7	11	—	—	—	—	—	—	
1		0	1	1	1	4	5	8	—	—	—	—	—	—	
1/0		0	1	1	1	3	4	7	—	—	—	—	—	—	
2/0		0	0	1	1	2	3	6	—	—	—	—	—	—	
3/0		0	0	1	1	1	3	5	—	—	—	—	—	—	
4/0		0	0	1	1	1	2	4	—	—	—	—	—	—	
250		0	0	0	1	1	1	3	—	—	—	—	—	—	
300		0	0	0	1	1	1	3	—	—	—	—	—	—	
350		0	0	0	1	1	1	2	—	—	—	—	—	—	
400		0	0	0	0	1	1	1	—	—	—	—	—	—	
500		0	0	0	0	1	1	1	—	—	—	—	—	—	
600		0	0	0	0	1	1	1	—	—	—	—	—	—	
700		0	0	0	0	1	1	1	—	—	—	—	—	—	
750	0	0	0	0	0	1	1	—	—	—	—	—	—		
800	0	0	0	0	0	1	1	—	—	—	—	—	—		
900	0	0	0	0	0	1	1	—	—	—	—	—	—		
1000	0	0	0	0	0	0	1	—	—	—	—	—	—		
FEP, FEPB, PFA, PFAH, TFE	14	7	12	21	35	61	79	130	—	—	—	—	—	—	
	12	5	9	15	25	44	58	94	—	—	—	—	—	—	
	10	4	6	11	18	32	41	68	—	—	—	—	—	—	
	8	1	3	6	10	18	23	39	—	—	—	—	—	—	
	6	1	2	4	7	13	17	27	—	—	—	—	—	—	
	4	1	1	3	5	9	12	19	—	—	—	—	—	—	

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{2}$ (27)	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$	(1
	3	1	1	2	4	7	10	16	—	—	—	—	—	—
	2	1	1	1	3	6	8	13	—	—	—	—	—	—
PFA, PFAH, TFE	1	0	1	1	2	4	5	9	—	—	—	—	—	—
PFA, PFAH, TFE, Z	1/0	0	1	1	1	3	4	7	—	—	—	—	—	—
	2/0	0	1	1	1	3	4	6	—	—	—	—	—	—
	3/0	0	0	1	1	2	3	5	—	—	—	—	—	—
	4/0	0	0	1	1	1	2	4	—	—	—	—	—	—
Z	14	9	15	26	42	73	95	156	—	—	—	—	—	—
	12	6	10	18	30	52	67	111	—	—	—	—	—	—
	10	4	6	11	18	32	41	68	—	—	—	—	—	—
	8	2	4	7	11	20	26	43	—	—	—	—	—	—
	6	1	3	5	8	14	18	30	—	—	—	—	—	—
	4	1	1	3	5	9	12	20	—	—	—	—	—	—
	3	1	1	2	4	7	9	15	—	—	—	—	—	—
	2	1	1	1	3	6	7	12	—	—	—	—	—	—
	1	1	1	1	2	5	6	10	—	—	—	—	—	—
	14	5	9	15	25	44	57	93	—	—	—	—	—	—
XHHW, ZW, XHHW-2, XHH	12	4	7	12	19	33	43	71	—	—	—	—	—	—
	10	3	5	9	14	25	32	53	—	—	—	—	—	—
	8	1	3	5	8	14	18	29	—	—	—	—	—	—
	6	1	1	3	6	10	13	22	—	—	—	—	—	—
	4	1	1	2	4	7	9	16	—	—	—	—	—	—
	3	1	1	1	3	6	8	13	—	—	—	—	—	—
	2	1	1	1	3	5	7	11	—	—	—	—	—	—
	1	0	1	1	1	4	5	8	—	—	—	—	—	—
	1/0	0	1	1	1	3	4	7	—	—	—	—	—	—
	2/0	0	0	1	1	2	3	6	—	—	—	—	—	—
XHHW, XHHW-2, XHH	3/0	0	0	1	1	1	3	5	—	—	—	—	—	—
	4/0	0	0	1	1	1	2	4	—	—	—	—	—	—
	250	0	0	0	1	1	1	3	—	—	—	—	—	—
	300	0	0	0	1	1	1	3	—	—	—	—	—	—
	350	0	0	0	1	1	1	2	—	—	—	—	—	—
	400	0	0	0	1	1	1	1	—	—	—	—	—	—
	500	0	0	0	0	1	1	1	—	—	—	—	—	—
	600	0	0	0	0	1	1	1	—	—	—	—	—	—
	700	0	0	0	0	1	1	1	—	—	—	—	—	—
	750	0	0	0	0	0	1	1	—	—	—	—	—	—
	800	0	0	0	0	0	1	1	—	—	—	—	—	—
	900	0	0	0	0	0	1	1	—	—	—	—	—	—
	1000	0	0	0	0	0	0	1	—	—	—	—	—	—
	1250	0	0	0	0	0	0	1	—	—	—	—	—	—
	1500	0	0	0	0	0	0	1	—	—	—	—	—	—
	1750	0	0	0	0	0	0	0	—	—	—	—	—	—
	2000	0	0	0	0	0	0	0	—	—	—	—	—	—

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$\frac{1}{4}$ (35)	$\frac{1}{2}$ (41)	$\frac{2}{53}$	$\frac{2}{2}$ (63)	$\frac{3}{78}$	$\frac{3}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$	(1
FIXTURE WIRES														
RFH-2, FFH-2, RFHH-2	18	5	8	15	24	42	54	89	—	—	—	—	—	—
	16	4	7	12	20	35	46	75	—	—	—	—	—	—
SF-2, SFF-2	18	6	11	19	30	53	69	113	—	—	—	—	—	—
	16	5	9	15	25	44	57	93	—	—	—	—	—	—
	14	4	7	12	20	35	46	75	—	—	—	—	—	—
SF-1, SFF-1	18	12	19	33	53	94	122	199	—	—	—	—	—	—
RFH-1, TF, TFF, XF, XFF	18	8	14	24	39	69	90	147	—	—	—	—	—	—
	16	7	11	20	32	56	72	119	—	—	—	—	—	—
XF, XFF	14	5	9	15	25	44	57	93	—	—	—	—	—	—
TFN, TFFN	18	14	23	39	63	111	144	236	—	—	—	—	—	—
	16	10	17	30	48	85	110	180	—	—	—	—	—	—
PF, PFF, PGF, PGFF, PAF, PTF, PTFF, PAFF	18	13	21	37	60	105	136	224	—	—	—	—	—	—
	16	10	16	29	46	81	105	173	—	—	—	—	—	—
	14	7	12	21	35	61	79	130	—	—	—	—	—	—
ZF, ZFF, ZHF	18	17	28	48	77	136	176	288	—	—	—	—	—	—
	16	12	20	35	57	100	130	213	—	—	—	—	—	—
	14	9	15	26	42	73	95	156	—	—	—	—	—	—
KF-2, KFF-2	18	25	42	72	116	203	264	433	—	—	—	—	—	—
	16	18	29	50	81	142	184	302	—	—	—	—	—	—
	14	12	19	34	54	95	124	203	—	—	—	—	—	—
	12	8	13	23	38	66	86	141	—	—	—	—	—	—
	10	5	9	15	25	44	57	93	—	—	—	—	—	—
KF-1, KFF-1	18	29	48	83	134	235	304	499	—	—	—	—	—	—
	16	20	34	58	94	165	214	351	—	—	—	—	—	—
	14	14	23	39	63	111	144	236	—	—	—	—	—	—
	12	9	15	26	42	73	95	156	—	—	—	—	—	—
	10	6	10	17	27	48	62	102	—	—	—	—	—	—
XF, XFF	12	3	5	8	13	23	30	50	—	—	—	—	—	—
	10	1	3	6	10	18	23	39	—	—	—	—	—	—

Notes:

1. This table is for concentric stranded conductors only. For compact stranded conductors, Table C.5(A) should be used.
2. Two-hour fire-rated RHH cable has ceramifiable insulation, which has much larger diameters than other RHH wires. Consult manufacturer's conduit fill tables.

*Types RHH, RHW, and RHW-2 without outer covering.

Table C.6(A) Maximum Number of Conductors or Fixture Wires in Liquidtight Flexible Nonmetallic Conduit (Type LFNC-B) (Based on Chapter 9: Table 1, Table 4, and Table 5A)

Type	Conductor	Trade Size (Metric Designator)												
------	-----------	--------------------------------	--	--	--	--	--	--	--	--	--	--	--	--

	Size (AWG/ kcmil)													
		<u>$\frac{3}{8}$(12)</u>	<u>$\frac{1}{2}$(16)</u>	<u>$\frac{3}{4}$(21)</u>	<u>$\frac{1}{27}$</u>	<u>$1\frac{1}{4}$(35)</u>	<u>$1\frac{1}{2}$(41)</u>	<u>$\frac{2}{53}$</u>	<u>$2\frac{1}{2}$(63)</u>	<u>$\frac{3}{78}$</u>	<u>$3\frac{1}{2}$(91)</u>	<u>$\frac{4}{103}$</u>	<u>$\frac{5}{129}$</u>	<u>$\frac{6}{141}$</u>
COMPACT CONDUCTORS														
THW, THW-2, THHW	8	1	2	4	7	12	15	25	—	—	—	—	—	—
	6	1	1	3	5	9	12	19	—	—	—	—	—	—
	4	1	1	2	4	7	9	14	—	—	—	—	—	—
	2	1	1	1	3	5	6	11	—	—	—	—	—	—
	1	0	1	1	1	3	4	7	—	—	—	—	—	—
	1/0	0	1	1	1	3	4	6	—	—	—	—	—	—
	2/0	0	0	1	1	2	3	5	—	—	—	—	—	—
	3/0	0	0	1	1	1	3	4	—	—	—	—	—	—
	4/0	0	0	1	1	1	2	4	—	—	—	—	—	—
	250	0	0	0	1	1	1	3	—	—	—	—	—	—
	300	0	0	0	1	1	1	2	—	—	—	—	—	—
	350	0	0	0	1	1	1	2	—	—	—	—	—	—
	400	0	0	0	0	1	1	1	—	—	—	—	—	—
	500	0	0	0	0	1	1	1	—	—	—	—	—	—
	600	0	0	0	0	1	1	1	—	—	—	—	—	—
	700	0	0	0	0	1	1	1	—	—	—	—	—	—
	750	0	0	0	0	0	1	1	—	—	—	—	—	—
	900	0	0	0	0	0	1	1	—	—	—	—	—	—
	1000	0	0	0	0	0	1	1	—	—	—	—	—	—
THHN, THWN, THWN-2	8	—	—	—	—	—	—	—	—	—	—	—	—	—
	6	1	2	4	7	13	17	28	—	—	—	—	—	—
	4	1	1	3	4	8	11	17	—	—	—	—	—	—
	2	1	1	1	3	6	7	12	—	—	—	—	—	—
	1	0	1	1	2	4	6	9	—	—	—	—	—	—
	1/0	0	1	1	1	4	5	8	—	—	—	—	—	—
	2/0	0	1	1	1	3	4	6	—	—	—	—	—	—
	3/0	0	0	1	1	2	3	5	—	—	—	—	—	—
	4/0	0	0	1	1	1	3	4	—	—	—	—	—	—
	250	0	0	1	1	1	1	3	—	—	—	—	—	—
	300	0	0	0	1	1	1	3	—	—	—	—	—	—
	350	0	0	0	1	1	1	2	—	—	—	—	—	—
	400	0	0	0	1	1	1	2	—	—	—	—	—	—
	500	0	0	0	0	1	1	1	—	—	—	—	—	—
	600	0	0	0	0	1	1	1	—	—	—	—	—	—
	700	0	0	0	0	1	1	1	—	—	—	—	—	—
	750	0	0	0	0	1	1	1	—	—	—	—	—	—
	900	0	0	0	0	0	1	1	—	—	—	—	—	—
	1000	0	0	0	0	0	1	1	—	—	—	—	—	—
XHHW, XHHW-2	8	1	3	5	9	15	20	33	—	—	—	—	—	—
	6	1	2	4	6	11	15	24	—	—	—	—	—	—
	4	1	1	3	4	8	11	17	—	—	—	—	—	—
	2	1	1	1	3	6	7	12	—	—	—	—	—	—
	1	0	1	1	2	4	6	9	—	—	—	—	—	—
	1/0	0	1	1	1	4	5	8	—	—	—	—	—	—
	2/0	0	1	1	1	3	4	7	—	—	—	—	—	—

3/0	0	0	1	1	2	3	5	—	—	—	—	—	—
4/0	0	0	1	1	1	3	4	—	—	—	—	—	—
250	0	0	1	1	1	1	3	—	—	—	—	—	—
300	0	0	0	1	1	1	3	—	—	—	—	—	—
350	0	0	0	1	1	1	3	—	—	—	—	—	—
400	0	0	0	1	1	1	2	—	—	—	—	—	—
500	0	0	0	0	1	1	1	—	—	—	—	—	—
600	0	0	0	0	1	1	1	—	—	—	—	—	—
700	0	0	0	0	1	1	1	—	—	—	—	—	—
750	0	0	0	0	1	1	1	—	—	—	—	—	—
900	0	0	0	0	0	1	1	—	—	—	—	—	—
1000	0	0	0	0	0	1	1	—	—	—	—	—	—

Definition: *Compact stranding* is the result of a manufacturing process where the stranded conductor is compressed to the extent that the interstices (voids between strand wires) are virtually eliminated.

Table C.7 Maximum Number of Conductors of Fixture Wires in Liquidtight Flexible Nonmetallic Conduit (Type LFNC-C) (Based on Chapter 9: Table 1, Table 4, and Table 5)

Type	Conductor Size (AWG/kcmil)	Trade Size (Metric Designator)												
		³ / ₈ (12)	¹ / ₂ (16)	³ / ₄ (21)	1 (27)	1 ¹ / ₄ (35)	1 ¹ / ₂ (41)	2 (53)	2 ¹ / ₂ (63)	3 (78)	3 ¹ / ₂ (91)	4 (103)	5 (129)	6 (155)
CONDUCTORS														
RHH, RHW, RHW-2	14	2	4	7	11	20	27	45	—	—	—	—	—	—
	12	1	3	6	9	16	22	37	—	—	—	—	—	—
	10	1	2	4	7	13	18	30	—	—	—	—	—	—
	8	1	1	2	4	7	9	15	—	—	—	—	—	—
	6	0	1	1	3	5	7	12	—	—	—	—	—	—
	4	0	1	1	2	4	6	10	—	—	—	—	—	—
	3	0	1	1	1	4	5	8	—	—	—	—	—	—
	2	0	0	1	1	3	4	7	—	—	—	—	—	—
	1	0	0	1	1	1	3	5	—	—	—	—	—	—
	1/0	0	0	0	1	1	2	4	—	—	—	—	—	—
	2/0	0	0	0	1	1	1	3	—	—	—	—	—	—
	3/0	0	0	0	1	1	1	3	—	—	—	—	—	—
	4/0	0	0	0	0	1	1	2	—	—	—	—	—	—
	250	0	0	0	0	1	1	1	—	—	—	—	—	—
	300	0	0	0	0	1	1	1	—	—	—	—	—	—
	350	0	0	0	0	0	1	1	—	—	—	—	—	—
	400	0	0	0	0	0	1	1	—	—	—	—	—	—
	500	0	0	0	0	0	1	1	—	—	—	—	—	—
	600	0	0	0	0	0	0	1	—	—	—	—	—	—
	700	0	0	0	0	0	0	1	—	—	—	—	—	—
	750	0	0	0	0	0	0	1	—	—	—	—	—	—
	800	0	0	0	0	0	0	1	—	—	—	—	—	—
	900	0	0	0	0	0	0	1	—	—	—	—	—	—
	1000	0	0	0	0	0	0	0	—	—	—	—	—	—
	1250	0	0	0	0	0	0	0	—	—	—	—	—	—
	1500	0	0	0	0	0	0	0	—	—	—	—	—	—
	1750	0	0	0	0	0	0	0	—	—	—	—	—	—
	2000	0	0	0	0	0	0	0	—	—	—	—	—	—
TW,	14	5	8	15	24	42	56	94	—	—	—	—	—	—

<u>Type</u>	<u>Conductor Size (AWG/kcmil)</u>	<u>Trade Size (Metric Designator)</u>												
		<u>3/8 (12)</u>	<u>1/2 (16)</u>	<u>3/4 (21)</u>	<u>1 (27)</u>	<u>1 1/4 (35)</u>	<u>1 1/2 (41)</u>	<u>2 (53)</u>	<u>2 1/2 (63)</u>	<u>3 (78)</u>	<u>3 1/2(91)</u>	<u>4 (103)</u>	<u>5 (129)</u>	<u>6 (155)</u>
THHW, THW, THW-2	12	4	6	11	18	32	43	72	—	—	—	—	—	—
	10	3	5	8	13	24	32	54	—	—	—	—	—	—
	8	1	2	4	7	13	18	30	—	—	—	—	—	—
RHH*, RHW*, RHW-2*	14	2	5	10	16	28	37	63	—	—	—	—	—	—
	12	2	4	8	13	22	30	50	—	—	—	—	—	—
	10	1	3	6	10	17	23	39	—	—	—	—	—	—
	8	1	1	3	6	10	14	23	—	—	—	—	—	—
TW, THW, THHW, THW-2, RHH*, RHW*, RHW-2	6	1	1	3	4	8	11	18	—	—	—	—	—	—
	4	1	1	1	3	6	8	13	—	—	—	—	—	—
	3	0	1	1	3	5	7	11	—	—	—	—	—	—
	2	0	1	1	2	4	6	10	—	—	—	—	—	—
	1	0	0	1	1	3	4	7	—	—	—	—	—	—
	1/0	0	0	1	1	2	3	6	—	—	—	—	—	—
	2/0	0	0	1	1	1	3	5	—	—	—	—	—	—
	3/0	0	0	0	1	1	2	4	—	—	—	—	—	—
	4/0	0	0	0	1	1	1	3	—	—	—	—	—	—
	250	0	0	0	0	1	1	3	—	—	—	—	—	—
	300	0	0	0	0	1	1	2	—	—	—	—	—	—
	350	0	0	0	0	1	1	1	—	—	—	—	—	—
	400	0	0	0	0	1	1	1	—	—	—	—	—	—
	500	0	0	0	0	0	1	1	—	—	—	—	—	—
	600	0	0	0	0	0	1	1	—	—	—	—	—	—
	700	0	0	0	0	0	0	1	—	—	—	—	—	—
	750	0	0	0	0	0	0	1	—	—	—	—	—	—
	800	0	0	0	0	0	0	1	—	—	—	—	—	—
	900	0	0	0	0	0	0	1	—	—	—	—	—	—
	1000	0	0	0	0	0	0	1	—	—	—	—	—	—
	1250	0	0	0	0	0	0	0	—	—	—	—	—	—
	1500	0	0	0	0	0	0	0	—	—	—	—	—	—
	1750	0	0	0	0	0	0	0	—	—	—	—	—	—
	2000	0	0	0	0	0	0	0	—	—	—	—	—	—
THHW, THWN, THWN-2	14	7	12	21	34	61	81	135	—	—	—	—	—	—
	12	5	9	15	25	44	59	98	—	—	—	—	—	—
	10	3	5	10	15	28	37	62	—	—	—	—	—	—
	8	1	3	5	9	16	21	36	—	—	—	—	—	—
	6	1	2	4	6	11	15	26	—	—	—	—	—	—
	4	1	1	2	4	7	9	16	—	—	—	—	—	—
	3	0	1	1	3	6	8	13	—	—	—	—	—	—
	2	0	1	1	3	5	7	11	—	—	—	—	—	—
	1	0	1	1	1	3	5	8	—	—	—	—	—	—
	1/0	0	1	1	1	3	4	7	—	—	—	—	—	—
	2/0	0	0	1	1	2	3	6	—	—	—	—	—	—
	3/0	0	0	1	1	1	3	5	—	—	—	—	—	—
	4/0	0	0	1	1	1	2	4	—	—	—	—	—	—
	250	0	0	0	1	1	1	3	—	—	—	—	—	—
	300	0	0	0	1	1	1	3	—	—	—	—	—	—

Type	Conductor Size (AWG/kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	1 (27)	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	2 (53)	$2\frac{1}{2}$ (63)	3 (78)	$3\frac{1}{2}$ (91)	4 (103)	5 (129)	6 (155)
	350	0	0	0	1	1	1	2	—	—	—	—	—	—
	400	0	0	0	0	1	1	1	—	—	—	—	—	—
	500	0	0	0	0	1	1	1	—	—	—	—	—	—
	600	0	0	0	0	1	1	1	—	—	—	—	—	—
	700	0	0	0	0	0	1	1	—	—	—	—	—	—
	750	0	0	0	0	0	1	1	—	—	—	—	—	—
	800	0	0	0	0	0	1	1	—	—	—	—	—	—
	900	0	0	0	0	0	1	1	—	—	—	—	—	—
	1000	0	0	0	0	0	0	1	—	—	—	—	—	—
	FEP, FEPB, PFA, PFAH, TFE	14	7	12	21	33	59	79	131	—	—	—	—	—
		12	5	9	15	24	43	57	96	—	—	—	—	—
		10	4	6	11	17	31	41	68	—	—	—	—	—
		8	1	3	6	10	17	23	39	—	—	—	—	—
	PFA, PFAH, TFE	6	1	2	4	7	12	17	28	—	—	—	—	—
		4	1	1	3	5	9	11	19	—	—	—	—	—
		3	1	1	2	4	7	10	16	—	—	—	—	—
		2	1	1	1	3	6	8	13	—	—	—	—	—
	PFA, PFAH, TFE, Z	1/0	0	1	1	1	3	4	8	—	—	—	—	—
		2/0	0	0	1	1	3	4	6	—	—	—	—	—
		3/0	0	0	1	1	2	3	5	—	—	—	—	—
		4/0	0	0	1	1	1	2	4	—	—	—	—	—
	Z	14	9	14	25	40	71	95	158	—	—	—	—	—
		12	6	10	18	28	50	67	112	—	—	—	—	—
		10	4	6	11	17	31	41	68	—	—	—	—	—
		8	2	4	7	11	19	26	43	—	—	—	—	—
		6	1	3	5	7	13	18	30	—	—	—	—	—
		4	1	1	3	5	9	12	21	—	—	—	—	—
		3	1	1	2	4	7	9	15	—	—	—	—	—
		2	1	1	1	3	5	7	12	—	—	—	—	—
		1	0	1	1	2	4	6	10	—	—	—	—	—
	XHHW, ZW, XHHW-2, XHH	14	5	8	15	24	42	56	94	—	—	—	—	—
		12	4	6	11	18	32	43	72	—	—	—	—	—
		10	3	5	8	13	24	32	54	—	—	—	—	—
		8	1	2	4	7	13	18	30	—	—	—	—	—
		6	1	1	3	5	10	13	22	—	—	—	—	—
		4	1	1	2	4	7	9	16	—	—	—	—	—
		3	1	1	1	3	6	8	13	—	—	—	—	—
		2	1	1	1	3	5	7	11	—	—	—	—	—
	XHHW, XHHW-2, XHH	1	0	1	1	1	4	5	8	—	—	—	—	—
		1/0	0	1	1	1	3	4	7	—	—	—	—	—
		2/0	0	0	1	1	2	3	6	—	—	—	—	—
		3/0	0	0	1	1	2	3	5	—	—	—	—	—
		4/0	0	0	1	1	1	2	4	—	—	—	—	—
		250	0	0	0	1	1	1	3	—	—	—	—	—

Type	Conductor Size (AWG/kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	1 (27)	1 $\frac{1}{4}$ (35)	1 $\frac{1}{2}$ (41)	2 (53)	2 $\frac{1}{2}$ (63)	3 (78)	3 $\frac{1}{2}$ (91)	4 (103)	5 (129)	6 (155)
	300	0	0	0	1	1	1	3	—	—	—	—	—	—
	350	0	0	0	1	1	1	2	—	—	—	—	—	—
	400	0	0	0	0	1	1	1	—	—	—	—	—	—
	500	0	0	0	0	1	1	1	—	—	—	—	—	—
	600	0	0	0	0	1	1	1	—	—	—	—	—	—
	700	0	0	0	0	0	1	1	—	—	—	—	—	—
	750	0	0	0	0	0	1	1	—	—	—	—	—	—
	800	0	0	0	0	0	1	1	—	—	—	—	—	—
	900	0	0	0	0	0	1	1	—	—	—	—	—	—
	1000	0	0	0	0	0	0	1	—	—	—	—	—	—
	1250	0	0	0	0	0	0	1	—	—	—	—	—	—
	1500	0	0	0	0	0	0	1	—	—	—	—	—	—
	1750	0	0	0	0	0	0	0	—	—	—	—	—	—
	2000	0	0	0	0	0	0	0	—	—	—	—	—	—
FIXTURE WIRES														
RFH-2, FFH-2, RFHH-2	18	5	8	14	23	40	54	90	—	—	—	—	—	—
	16	4	7	12	19	34	46	76	—	—	—	—	—	—
SF-2, SFF-2	18	6	10	18	29	51	68	114	—	—	—	—	—	—
	16	5	8	15	24	42	56	94	—	—	—	—	—	—
	14	4	7	12	19	34	46	76	—	—	—	—	—	—
SF-1, SFF-1	18	11	18	32	51	90	121	202	—	—	—	—	—	—
RFH-1, TF, TFF, XF, XFF	18	8	13	23	38	67	89	149	—	—	—	—	—	—
	16	6	11	19	30	54	72	120	—	—	—	—	—	—
XF, XFF	14	5	8	15	24	42	56	94	—	—	—	—	—	—
TFN, TFFN	18	13	22	38	60	107	143	239	—	—	—	—	—	—
	16	10	17	29	46	82	109	182	—	—	—	—	—	—
PF, PFF, PGF, PGFF, PAF, PTF, PTFF, PAFF	18	12	21	36	57	101	136	226	—	—	—	—	—	—
	16	10	16	28	44	78	105	175	—	—	—	—	—	—
	14	7	12	21	33	59	79	131	—	—	—	—	—	—
	12	5	8	15	24	42	56	94	—	—	—	—	—	—
ZF, ZFF, ZHF	18	16	27	46	74	131	175	292	—	—	—	—	—	—
	16	12	20	34	54	96	129	215	—	—	—	—	—	—
	14	9	14	25	40	71	95	131	—	—	—	—	—	—
KF-2, KFF-2	18	24	40	69	111	196	263	438	—	—	—	—	—	—
	16	17	28	48	77	137	183	305	—	—	—	—	—	—
	14	11	19	32	52	92	123	205	—	—	—	—	—	—
	12	8	13	22	36	64	85	142	—	—	—	—	—	—
	10	5	8	15	24	42	56	94	—	—	—	—	—	—
KF-1, KFF-1	18	28	46	80	128	227	303	505	—	—	—	—	—	—
	16	20	32	56	90	159	213	355	—	—	—	—	—	—
	14	13	22	38	60	107	143	239	—	—	—	—	—	—
	12	9	14	25	40	71	95	158	—	—	—	—	—	—
	10	6	9	16	26	46	62	103	—	—	—	—	—	—

Type	Conductor Size (AWG/kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	1 (27)	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	2 (53)	$2\frac{1}{2}$ (63)	3 (78)	$3\frac{1}{2}$ (91)	4 (103)	5 (129)	6 (155)
XF, XFF	12	3	4	8	13	22	30	50	—	—	—	—	—	—
	10	1	3	6	10	17	23	39	—	—	—	—	—	—

Notes:

1. This table is for concentric stranded conductors only. For compact stranded conductors, Table C.5(A) should be used.

2. Two-hour fire-rated RHH cable has ceramifiable insulation, which has larger diameters than other RHH wires.

Consult manufacturer's conduit fill tables.

*Types RHH, RHW, and RHW-2 without outer covering.

Table C.7(A) Maximum Number of Conductors of Fixture Wires in Liquidtight Flexible Nonmetallic Conduit (Type LFNC-C) (Based on Chapter 9: Table 1, Table 4, and Table 5A)

Type	Conductor Size (AWG/kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	1 (27)	1 $\frac{1}{4}$ (35)	1 $\frac{1}{2}$ (41)	2 (53)	2 $\frac{1}{2}$ (63)	3 (78)	3 $\frac{1}{2}$ (91)	4 (103)	5 (129)	6 (155)
COMPACT CONDUCTORS														
THW, THW-2, THHW	8	1	2	4	6	11	15	25	—	—	—	—	—	—
	6	1	1	3	5	9	12	20	—	—	—	—	—	—
	4	1	1	2	3	6	9	15	—	—	—	—	—	—
	2	1	1	1	2	5	6	11	—	—	—	—	—	—
	1	0	1	1	1	3	4	7	—	—	—	—	—	—
	1/0	0	1	1	1	3	4	6	—	—	—	—	—	—
	2/0	0	0	1	1	2	3	5	—	—	—	—	—	—
	3/0	0	0	1	1	1	3	5	—	—	—	—	—	—
	4/0	0	0	1	1	1	2	4	—	—	—	—	—	—
	250	0	0	0	1	1	1	3	—	—	—	—	—	—
	300	0	0	0	1	1	1	2	—	—	—	—	—	—
	350	0	0	0	1	1	1	2	—	—	—	—	—	—
	400	0	0	0	0	1	1	1	—	—	—	—	—	—
	500	0	0	0	0	1	1	1	—	—	—	—	—	—
	600	0	0	0	0	1	1	1	—	—	—	—	—	—
	700	0	0	0	0	1	1	1	—	—	—	—	—	—
	750	0	0	0	0	0	1	1	—	—	—	—	—	—
	900	0	0	0	0	0	1	1	—	—	—	—	—	—
	1000	0	0	0	0	0	1	1	—	—	—	—	—	—
	THHN, THWN, THWN-2	8	—	—	—	—	—	—	—	—	—	—	—	—
6		1	2	4	7	13	17	29	—	—	—	—	—	—
4		1	1	3	4	8	11	18	—	—	—	—	—	—
2		1	1	1	3	6	7	13	—	—	—	—	—	—
1		0	1	1	2	4	6	9	—	—	—	—	—	—
1/0		0	1	1	1	3	5	8	—	—	—	—	—	—
2/0		0	1	1	1	3	4	7	—	—	—	—	—	—
3/0		0	0	1	1	2	3	5	—	—	—	—	—	—
4/0		0	0	1	1	1	3	4	—	—	—	—	—	—
250		0	0	0	1	1	1	3	—	—	—	—	—	—
300		0	0	0	1	1	1	3	—	—	—	—	—	—
350		0	0	0	1	1	1	3	—	—	—	—	—	—

Type	Conductor Size (AWG/kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	1 (27)	1 $\frac{1}{4}$ (35)	1 $\frac{1}{2}$ (41)	2 (53)	2 $\frac{1}{2}$ (63)	3 (78)	3 $\frac{1}{2}$ (91)	4 (103)	5 (129)	6 (155)
	400	0	0	0	1	1	1	2	—	—	—	—	—	—
	500	0	0	0	0	1	1	1	—	—	—	—	—	—
	600	0	0	0	0	1	1	1	—	—	—	—	—	—
	700	0	0	0	0	1	1	1	—	—	—	—	—	—
	750	0	0	0	0	1	1	1	—	—	—	—	—	—
	900	0	0	0	0	0	1	1	—	—	—	—	—	—
	1000	0	0	0	0	0	1	1	—	—	—	—	—	—
XHHW, XHHW-2	8	1	3	5	8	15	20	33	—	—	—	—	—	—
	6	1	1	4	6	11	15	24	—	—	—	—	—	—
	4	1	1	3	4	8	11	18	—	—	—	—	—	—
	2	1	1	1	3	6	7	13	—	—	—	—	—	—
	1	0	1	1	2	4	6	9	—	—	—	—	—	—
	1/0	0	1	1	1	3	5	8	—	—	—	—	—	—
	2/0	0	1	1	1	3	4	7	—	—	—	—	—	—
	3/0	0	0	1	1	2	3	5	—	—	—	—	—	—
	4/0	0	0	1	1	1	3	5	—	—	—	—	—	—
	250	0	0	1	1	1	1	4	—	—	—	—	—	—
	300	0	0	0	1	1	1	3	—	—	—	—	—	—
	350	0	0	0	1	1	1	3	—	—	—	—	—	—
	400	0	0	0	1	1	1	2	—	—	—	—	—	—
	500	0	0	0	0	1	1	1	—	—	—	—	—	—
	600	0	0	0	0	1	1	1	—	—	—	—	—	—
	700	0	0	0	0	1	1	1	—	—	—	—	—	—
	750	0	0	0	0	1	1	1	—	—	—	—	—	—
	900	0	0	0	0	0	1	1	—	—	—	—	—	—
	1000	0	0	0	0	0	1	1	—	—	—	—	—	—

Definition: Compact stranding is the result of a manufacturing process where the stranded conductor is compressed to the extent that the interstices (voids between stranded wires) are virtually eliminated.

Table C.8 Maximum Number of Conductors or Fixture Wires in Liquidtight Flexible Metal Conduit (LFMC)
(Based on Chapter 9: Table 1, Table 4, and Table 5)

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		³ / ₈ (12)	¹ / ₂ (16)	³ / ₄ (21)	<u>1</u> (27)	<u>1</u> ¹ / ₄ (35)	<u>1</u> ¹ / ₂ (41)	<u>2</u> (53)	<u>2</u> ¹ / ₂ (63)	<u>3</u> (78)	<u>3</u> ¹ / ₂ (91)	<u>4</u> (103)	<u>5</u> (129)	(155)
CONDUCTORS														
RHH, RHW, RHW-2	14	2	4	7	12	21	27	44	66	102	133	173	—	—
	12	1	3	6	10	17	22	36	55	84	110	144	—	—
	10	1	3	5	8	14	18	29	44	68	89	116	—	—
	8	1	1	2	4	7	9	15	23	36	46	61	—	—
	6	1	1	1	3	6	7	12	18	28	37	48	—	—
	4	0	1	1	2	4	6	9	14	22	29	38	—	—
	3	0	1	1	1	4	5	8	13	19	25	33	—	—
	2	0	1	1	1	3	4	7	11	17	22	29	—	—
	1	0	0	1	1	1	3	5	7	11	14	19	—	—
	1/0	0	0	1	1	1	2	4	6	10	13	16	—	—
	2/0	0	0	1	1	1	1	3	5	8	11	14	—	—
	3/0	0	0	0	1	1	1	3	4	7	9	12	—	—

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)													
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$ (27)	$\frac{1}{4}$ (35)	$\frac{1}{2}$ (41)	$\frac{2}{53}$ (53)	$2\frac{1}{2}$ (63)	$\frac{3}{78}$ (78)	$3\frac{1}{2}$ (91)	(103)	$\frac{5}{129}$ (129)	(143)	
4/0	0	0	0	1	1	1	2	4	6	8	10	—	—		
	250	0	0	0	0	1	1	1	3	4	6	8	—	—	
	300	0	0	0	0	1	1	1	2	4	5	7	—	—	
	350	0	0	0	0	1	1	1	2	3	5	6	—	—	
	400	0	0	0	0	1	1	1	1	3	4	6	—	—	
	500	0	0	0	0	1	1	1	1	3	4	5	—	—	
	600	0	0	0	0	0	1	1	1	2	3	4	—	—	
	700	0	0	0	0	0	0	1	1	1	3	3	—	—	
	750	0	0	0	0	0	0	1	1	1	2	3	—	—	
	800	0	0	0	0	0	0	1	1	1	2	3	—	—	
	900	0	0	0	0	0	0	1	1	1	2	3	—	—	
	1000	0	0	0	0	0	0	1	1	1	1	3	—	—	
	1250	0	0	0	0	0	0	0	1	1	1	1	—	—	
	1500	0	0	0	0	0	0	0	1	1	1	1	—	—	
	1750	0	0	0	0	0	0	0	1	1	1	1	—	—	
	2000	0	0	0	0	0	0	0	0	1	1	1	—	—	
	TW, THHW, THW, THW-2	14	5	9	15	25	44	57	93	140	215	280	365	—	—
		12	4	7	12	19	33	43	71	108	165	215	280	—	—
		10	3	5	9	14	25	32	53	80	123	160	209	—	—
		8	1	3	5	8	14	18	29	44	68	89	116	—	—
	RHH*, RHW*, RHW-2*	14	3	6	10	16	29	38	62	93	143	186	243	—	—
12		3	5	8	13	23	30	50	75	115	149	195	—	—	
10		1	3	6	10	18	23	39	58	89	117	152	—	—	
8		1	1	4	6	11	14	23	35	53	70	91	—	—	
TW, THW, THHW, THW-2, RHH*, RHW*, RHW-2*	6	1	1	3	5	8	11	18	27	41	53	70	—	—	
	4	1	1	1	3	6	8	13	20	30	40	52	—	—	
	3	1	1	1	3	5	7	11	17	26	34	44	—	—	
	2	0	1	1	2	4	6	9	14	22	29	38	—	—	
	1	0	1	1	1	3	4	7	10	15	20	26	—	—	
	1/0	0	0	1	1	2	3	6	8	13	17	23	—	—	
	2/0	0	0	1	1	2	3	5	7	11	15	19	—	—	
	3/0	0	0	1	1	1	2	4	6	9	12	16	—	—	
	4/0	0	0	0	1	1	1	3	5	8	10	13	—	—	
	250	0	0	0	1	1	1	3	4	6	8	11	—	—	
	300	0	0	0	1	1	1	2	3	5	7	9	—	—	
	350	0	0	0	0	1	1	1	3	5	6	8	—	—	
	400	0	0	0	0	1	1	1	3	4	6	7	—	—	
	500	0	0	0	0	1	1	1	2	3	5	6	—	—	
	600	0	0	0	0	1	1	1	1	3	4	5	—	—	
	700	0	0	0	0	0	1	1	1	2	3	4	—	—	
	750	0	0	0	0	0	1	1	1	2	3	4	—	—	
	800	0	0	0	0	0	1	1	1	2	3	4	—	—	
	900	0	0	0	0	0	0	1	1	1	3	3	—	—	
	1000	0	0	0	0	0	0	1	1	1	2	3	—	—	
1250	0	0	0	0	0	0	1	1	1	1	2	—	—		

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)													
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$ (27)	$\frac{1}{4}$ (35)	$\frac{1}{2}$ (41)	$\frac{2}{53}$ (53)	$\frac{2}{2}$ (63)	$\frac{3}{78}$ (78)	$\frac{3}{2}$ (91)	$\frac{4}{103}$ (103)	$\frac{5}{129}$ (129)	(143)	
	1500	0	0	0	0	0	0	0	1	1	1	2	—	—	
	1750	0	0	0	0	0	0	0	1	1	1	1	—	—	
	2000	0	0	0	0	0	0	0	1	1	1	1	—	—	
THHN, THWN, THWN-2	14	8	13	22	36	63	81	134	201	308	401	523	—	—	
	12	5	9	16	26	46	59	97	146	225	292	381	—	—	
	10	3	6	10	16	29	37	61	92	141	184	240	—	—	
	8	1	3	6	9	16	21	35	53	81	106	138	—	—	
	6	1	2	4	7	12	15	25	38	59	76	100	—	—	
	4	1	1	2	4	7	9	15	23	36	47	61	—	—	
	3	1	1	1	3	6	8	13	20	30	40	52	—	—	
	2	1	1	1	3	5	7	11	17	26	33	44	—	—	
	1	0	1	1	1	4	5	8	12	19	25	32	—	—	
	1/0	0	1	1	1	3	4	7	10	16	21	27	—	—	
	2/0	0	0	1	1	2	3	6	8	13	17	23	—	—	
	3/0	0	0	1	1	1	3	5	7	11	14	19	—	—	
	4/0	0	0	1	1	1	2	4	6	9	12	15	—	—	
	250	0	0	0	1	1	1	3	5	7	10	12	—	—	
	300	0	0	0	1	1	1	3	4	6	8	11	—	—	
	350	0	0	0	1	1	1	2	3	5	7	9	—	—	
	400	0	0	0	0	1	1	1	3	5	6	8	—	—	
	500	0	0	0	0	1	1	1	2	4	5	7	—	—	
	600	0	0	0	0	1	1	1	1	3	4	6	—	—	
	700	0	0	0	0	1	1	1	1	3	4	5	—	—	
	750	0	0	0	0	0	1	1	1	3	3	5	—	—	
	800	0	0	0	0	0	1	1	1	2	3	4	—	—	
	900	0	0	0	0	0	1	1	1	2	3	4	—	—	
	1000	0	0	0	0	0	0	1	1	1	3	3	—	—	
FEP, FEPB, PFA, PFAH, TFE	14	7	12	21	35	61	79	130	195	299	389	507	—	—	
	12	5	9	15	25	44	58	94	142	218	284	370	—	—	
	10	4	6	11	18	32	41	68	102	156	203	266	—	—	
	8	1	3	6	10	18	23	39	58	89	117	152	—	—	
	6	1	2	4	7	13	17	27	41	64	83	108	—	—	
	4	1	1	3	5	9	12	19	29	44	58	75	—	—	
	3	1	1	2	4	7	10	16	24	37	48	63	—	—	
	2	1	1	1	3	6	8	13	20	30	40	52	—	—	
PFA, PFAH, TFE	1	0	1	1	2	4	5	9	14	21	28	36	—	—	
PFA, PFAH, TFE, Z	1/0	0	1	1	1	3	4	7	11	18	23	30	—	—	
	2/0	0	1	1	1	3	4	6	9	14	19	25	—	—	
	3/0	0	0	1	1	2	3	5	8	12	16	20	—	—	
	4/0	0	0	1	1	1	2	4	6	10	13	17	—	—	
Z	14	9	15	26	42	73	95	156	235	360	469	611	—	—	
	12	6	10	18	30	52	67	111	167	255	332	434	—	—	
	10	4	6	11	18	32	41	68	102	156	203	266	—	—	
	8	2	4	7	11	20	26	43	64	99	129	168	—	—	

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{2}$ (27)	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{3}$ (53)	$2\frac{1}{2}$ (63)	$\frac{3}{2}$ (78)	$3\frac{1}{2}$ (91)	$\frac{4}{3}$ (103)	$\frac{5}{2}$ (129)	(1
	6	1	3	5	8	14	18	30	45	69	90	118	—	—
	4	1	1	3	5	9	12	20	31	48	62	81	—	—
	3	1	1	2	4	7	9	15	23	35	45	59	—	—
	2	1	1	1	3	6	7	12	19	29	38	49	—	—
	1	1	1	1	2	5	6	10	15	23	30	40	—	—
XHHW, ZW, XHHW-2, XHH	14	5	9	15	25	44	57	93	140	215	280	365	—	—
	12	4	7	12	19	33	43	71	108	165	215	280	—	—
	10	3	5	9	14	25	32	53	80	123	160	209	—	—
	8	1	3	5	8	14	18	29	44	68	89	116	—	—
	6	1	1	3	6	10	13	22	33	50	66	86	—	—
	4	1	1	2	4	7	9	16	24	36	48	62	—	—
	3	1	1	1	3	6	8	13	20	31	40	52	—	—
	2	1	1	1	3	5	7	11	17	26	34	44	—	—
XHHW, XHHW-2, XHH	1	0	1	1	1	4	5	8	12	19	25	33	—	—
	1/0	0	1	1	1	3	4	7	10	16	21	28	—	—
	2/0	0	0	1	1	2	3	6	9	13	17	23	—	—
	3/0	0	0	1	1	1	3	5	7	11	14	19	—	—
	4/0	0	0	1	1	1	2	4	6	9	12	16	—	—
	250	0	0	0	1	1	1	3	5	7	10	13	—	—
	300	0	0	0	1	1	1	3	4	6	8	11	—	—
	350	0	0	0	1	1	1	2	3	5	7	10	—	—
	400	0	0	0	1	1	1	1	3	5	6	8	—	—
	500	0	0	0	0	1	1	1	2	4	5	7	—	—
	600	0	0	0	0	1	1	1	1	3	4	6	—	—
	700	0	0	0	0	1	1	1	1	3	4	5	—	—
	750	0	0	0	0	0	1	1	1	3	3	5	—	—
	800	0	0	0	0	0	1	1	1	2	3	4	—	—
	900	0	0	0	0	0	1	1	1	2	3	4	—	—
	1000	0	0	0	0	0	0	1	1	1	3	3	—	—
	1250	0	0	0	0	0	0	1	1	1	1	3	—	—
	1500	0	0	0	0	0	0	1	1	1	1	2	—	—
	1750	0	0	0	0	0	0	0	1	1	1	1	—	—
	2000	0	0	0	0	0	0	0	1	1	1	1	—	—
FIXTURE WIRES														
RFH-2, FFH-2, RFHH-2	18	5	8	15	24	42	54	89	134	206	268	350	—	—
	16	4	7	12	20	35	46	75	113	174	226	295	—	—
SF-2, SFF-2	18	6	11	19	30	53	69	113	169	260	338	441	—	—
	16	5	9	15	25	44	57	93	140	215	280	365	—	—
	14	4	7	12	20	35	46	75	113	174	226	295	—	—
SF-1, SFF-1	18	12	19	33	53	94	122	199	300	460	599	781	—	—
RFH-1, TF, TFF, XF, XFF	18	8	14	24	39	69	90	147	222	339	442	577	—	—
	16	7	11	20	32	56	72	119	179	274	357	465	—	—
XF, XFF	14	5	9	15	25	44	57	93	140	215	280	365	—	—
TFN,	18	14	23	39	63	111	144	236	355	543	707	923	—	—

Type	Conductor Size (AWG/kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$ (27)	$\frac{1}{4}$ (35)	$\frac{1}{2}$ (41)	$\frac{2}{53}$ (53)	$\frac{2}{2}$ (63)	$\frac{3}{78}$ (78)	$\frac{3}{2}$ (91)	$\frac{4}{103}$ (103)	$\frac{5}{129}$ (129)	(150)
TFFN	16	10	17	30	48	85	110	180	271	415	540	705	—	—
PF, PFF, PGF, PGFF, PAF, PTF, PTF, PAFF	18	13	21	37	60	105	136	224	336	515	671	875	—	—
	16	10	16	29	46	81	105	173	260	398	519	677	—	—
	14	7	12	21	35	61	79	130	195	299	389	507	—	—
	12	5	9	15	25	44	57	93	140	215	280	365	—	—
ZF, ZFF, ZHF	18	17	28	48	77	136	176	288	434	664	865	1128	—	—
	16	12	20	35	57	100	130	213	320	490	638	832	—	—
	14	9	15	26	42	73	95	156	235	360	469	611	—	—
KF-2, KFF-2	18	25	42	72	116	203	264	433	651	996	1297	1692	—	—
	16	18	29	50	81	142	184	302	454	695	905	1180	—	—
	14	12	19	34	54	95	124	203	305	467	608	793	—	—
	12	8	13	23	38	66	86	141	212	325	423	552	—	—
	10	5	9	15	25	44	57	93	140	215	280	365	—	—
KF-1, KFF-1	18	29	48	83	134	235	304	499	751	1150	1497	1952	—	—
	16	20	34	58	94	165	214	351	527	808	1052	1372	—	—
	14	14	23	39	63	111	144	236	355	543	707	923	—	—
	12	9	15	26	42	73	95	156	235	360	469	611	—	—
	10	6	10	17	27	48	62	102	153	235	306	399	—	—
XF, XFF	12	3	5	8	13	23	30	50	75	115	149	195	—	—
	10	1	3	6	10	18	23	39	58	89	117	152	—	—

Notes:

1. This table is for concentric stranded conductors only. For compact stranded conductors, Table C.7(A) should be used.
2. Two-hour fire-rated RHH cable has ceramifiable insulation, which has much larger diameters than other RHH wires. Consult manufacturer's conduit fill tables.

*Types RHH, RHW, and RHW-2 without outer covering.

Table C.8(A) Maximum Number of Conductors or Fixture Wires in Liquidtight Flexible Metal Conduit (LFMC) (Based on Chapter 9: Table 1, Table 4, and Table 5A)

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$ (27)	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$ (53)	$2\frac{1}{2}$ (63)	$\frac{3}{78}$ (78)	$3\frac{1}{2}$ (91)	$\frac{4}{103}$ (103)	$\frac{5}{129}$ (129)	$\frac{6}{150}$ (150)
COMPACT CONDUCTORS														
THW, THW-2, THHW	8	1	2	4	7	12	15	25	38	58	76	99	—	—
	6	1	1	3	5	9	12	19	29	45	59	77	—	—
	4	1	1	2	4	7	9	14	22	34	44	57	—	—
	2	1	1	1	3	5	6	11	16	25	32	42	—	—
	1	0	1	1	1	3	4	7	11	17	23	30	—	—
	1/0	0	1	1	1	3	4	6	10	15	20	26	—	—
	2/0	0	0	1	1	2	3	5	8	13	16	21	—	—
	3/0	0	0	1	1	1	3	4	7	11	14	18	—	—
	4/0	0	0	1	1	1	2	4	6	9	12	15	—	—
	250	0	0	0	1	1	1	3	4	7	9	12	—	—
	300	0	0	0	1	1	1	2	4	6	8	10	—	—

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)													
		³ / ₈ (12)	¹ / ₂ (16)	³ / ₄ (21)	¹ (27)	¹ ¹ / ₄ (35)	¹ ¹ / ₂ (41)	² (53)	² ¹ / ₂ (63)	³ (78)	³ ¹ / ₂ (91)	⁴ (103)	⁵ (129)	⁶ (150)	
	350	0	0	0	1	1	1	2	3	5	7	9	—	—	
	400	0	0	0	0	1	1	1	3	5	6	8	—	—	
	500	0	0	0	0	1	1	1	3	4	5	7	—	—	
	600	0	0	0	0	1	1	1	1	3	4	6	—	—	
	700	0	0	0	0	1	1	1	1	3	4	5	—	—	
	750	0	0	0	0	0	1	1	1	3	3	5	—	—	
	900	0	0	0	0	0	1	1	1	2	3	4	—	—	
	1000	0	0	0	0	0	1	1	1	1	3	4	—	—	
THHN, THWN, THWN-2	8	—	—	—	—	—	—	—	—	—	—	—	—	—	
	6	1	2	4	7	13	17	28	43	66	86	112	—	—	
	4	1	1	3	4	8	11	17	26	41	53	69	—	—	
	2	1	1	1	3	6	7	12	19	29	38	50	—	—	
	1	0	1	1	2	4	6	9	14	22	28	37	—	—	
	1/0	0	1	1	1	4	5	8	12	19	24	32	—	—	
	2/0	0	1	1	1	3	4	6	10	15	20	26	—	—	
	3/0	0	0	1	1	2	3	5	8	13	17	22	—	—	
	4/0	0	0	1	1	1	3	4	7	10	14	18	—	—	
	250	0	0	1	1	1	1	3	5	8	11	14	—	—	
	300	0	0	0	1	1	1	3	4	7	9	12	—	—	
	350	0	0	0	1	1	1	2	4	6	8	11	—	—	
	400	0	0	0	1	1	1	2	3	5	7	9	—	—	
	500	0	0	0	0	1	1	1	3	5	6	8	—	—	
	600	0	0	0	0	1	1	1	2	4	5	6	—	—	
	700	0	0	0	0	1	1	1	1	3	4	6	—	—	
	750	0	0	0	0	1	1	1	1	3	4	5	—	—	
	900	0	0	0	0	0	1	1	1	2	3	4	—	—	
	1000	0	0	0	0	0	1	1	1	2	3	4	—	—	
XHHW, XHHW-2	8	1	3	5	9	15	20	33	49	76	98	129	—	—	
	6	1	2	4	6	11	15	24	37	56	73	95	—	—	
	4	1	1	3	4	8	11	17	26	41	53	69	—	—	
	2	1	1	1	3	6	7	12	19	29	38	50	—	—	
	1	0	1	1	2	4	6	9	14	22	28	37	—	—	
	1/0	0	1	1	1	4	5	8	12	19	24	32	—	—	
	2/0	0	1	1	1	3	4	7	10	16	20	27	—	—	
	3/0	0	0	1	1	2	3	5	8	13	17	22	—	—	
	4/0	0	0	1	1	1	3	4	7	11	14	18	—	—	
	250	0	0	1	1	1	1	3	5	8	11	15	—	—	
	300	0	0	0	1	1	1	3	5	7	9	12	—	—	
	350	0	0	0	1	1	1	3	4	6	8	11	—	—	
	400	0	0	0	1	1	1	2	4	6	7	10	—	—	
	500	0	0	0	0	1	1	1	3	5	6	8	—	—	
	600	0	0	0	0	1	1	1	2	4	5	6	—	—	
	700	0	0	0	0	1	1	1	1	3	4	6	—	—	
	750	0	0	0	0	1	1	1	1	3	4	5	—	—	
	900	0	0	0	0	0	1	1	1	2	3	4	—	—	
	1000	0	0	0	0	0	1	1	1	2	3	4	—	—	

Definition: *Compact stranding* is the result of a manufacturing process where the stranded conductor is compressed to the extent that the interstices (voids between strand wires) are virtually eliminated.

Table C.9 Maximum Number of Conductors or Fixture Wires in Rigid Metal Conduit (RMC) (Based on Chapter 9: Table 1, Table 4, and Table 5)

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)													
		³ / ₈ (12)	¹ / ₂ (16)	³ / ₄ (21)	¹ (27)	¹ / ₄ (35)	¹ / ₂ (41)	² (53)	² / ₁ (63)	³ (78)	³ / ₂ (91)	⁴ (103)	⁵ (129)	(152)	
CONDUCTORS															
RHH, RHW, RHW-2	14	—	4	7	12	21	28	46	66	102	136	176	276	396	
	12	—	3	6	10	17	23	38	55	85	113	146	229	333	
	10	—	3	5	8	14	19	31	44	68	91	118	185	266	
	8	—	1	2	4	7	10	16	23	36	48	61	97	133	
	6	—	1	1	3	6	8	13	18	29	38	49	77	111	
	4	—	1	1	2	4	6	10	14	22	30	38	60	87	
	3	—	1	1	2	4	5	9	12	19	26	34	53	76	
	2	—	1	1	1	3	4	7	11	17	23	29	46	66	
	1	—	0	1	1	1	3	5	7	11	15	19	30	44	
	1/0	—	0	1	1	1	2	4	6	10	13	17	26	38	
	2/0	—	0	1	1	1	2	4	5	8	11	14	23	33	
	3/0	—	0	0	1	1	1	3	4	7	10	12	20	28	
	4/0	—	0	0	1	1	1	3	4	6	8	11	17	24	
	250	—	0	0	0	1	1	1	3	4	6	8	13	18	
	300	—	0	0	0	1	1	1	2	4	5	7	11	16	
	350	—	0	0	0	1	1	1	2	4	5	6	10	15	
	400	—	0	0	0	1	1	1	1	3	4	6	9	13	
	500	—	0	0	0	1	1	1	1	3	4	5	8	11	
	600	—	0	0	0	0	1	1	1	2	3	4	6	9	
	700	—	0	0	0	0	1	1	1	1	3	3	6	8	
	750	—	0	0	0	0	0	1	1	1	3	3	5	8	
	800	—	0	0	0	0	0	1	1	1	2	3	5	7	
	900	—	0	0	0	0	0	1	1	1	2	3	5	7	
1000	—	0	0	0	0	0	1	1	1	1	3	4	6		
1250	—	0	0	0	0	0	0	1	1	1	1	3	5		
1500	—	0	0	0	0	0	0	1	1	1	1	3	4		
1750	—	0	0	0	0	0	0	1	1	1	1	2	4		
2000	—	0	0	0	0	0	0	0	0	1	1	2	3		
TW, THHW, THW, THW-2	14	—	9	15	25	44	59	98	140	215	288	370	581	833	
	12	—	7	12	19	33	45	75	107	165	221	284	446	644	
	10	—	5	9	14	25	34	56	80	123	164	212	332	483	
	8	—	3	5	8	14	19	31	44	68	91	118	185	266	
RHH*, RHW*, RHW-2*	14	—	6	10	17	29	39	65	93	143	191	246	387	555	
	12	—	5	8	13	23	32	52	75	115	154	198	311	444	
	10	—	3	6	10	18	25	41	58	90	120	154	242	353	
	8	—	1	4	6	11	15	24	35	54	72	92	145	203	
TW, THW, THHW, THW-2, RHH*, RHW*, RHW-2*	6	—	1	3	5	8	11	18	27	41	55	71	111	161	
	4	—	1	1	3	6	8	14	20	31	41	53	83	121	
	3	—	1	1	3	5	7	12	17	26	35	45	71	101	
	2	—	1	1	2	4	6	10	14	22	30	38	60	87	
	1	—	1	1	1	3	4	7	10	15	21	27	42	61	

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$	(1
	1/0	—	0	1	1	2	3	6	8	13	18	23	36	52
	2/0	—	0	1	1	2	3	5	7	11	15	19	31	44
	3/0	—	0	1	1	1	2	4	6	9	13	16	26	37
	4/0	—	0	0	1	1	1	3	5	8	10	14	21	31
	250	—	0	0	1	1	1	3	4	6	8	11	17	25
	300	—	0	0	1	1	1	2	3	5	7	9	15	22
	350	—	0	0	0	1	1	1	3	5	6	8	13	19
	400	—	0	0	0	1	1	1	3	4	6	7	12	17
	500	—	0	0	0	1	1	1	2	3	5	6	10	14
	600	—	0	0	0	1	1	1	1	3	4	5	8	12
	700	—	0	0	0	0	1	1	1	2	3	4	7	10
	750	—	0	0	0	0	1	1	1	2	3	4	7	10
	800	—	0	0	0	0	1	1	1	2	3	4	6	9
	900	—	0	0	0	0	1	1	1	1	3	3	6	8
	1000	—	0	0	0	0	0	1	1	1	2	3	5	8
	1250	—	0	0	0	0	0	1	1	1	1	2	4	6
	1500	—	0	0	0	0	0	1	1	1	1	2	3	5
	1750	—	0	0	0	0	0	0	1	1	1	1	3	4
	2000	—	0	0	0	0	0	0	1	1	1	1	3	4
THHN, THWN, THWN-2	14	—	13	22	36	63	85	140	200	309	412	531	833	12
	12	—	9	16	26	46	62	102	146	225	301	387	608	87
	10	—	6	10	17	29	39	64	92	142	189	244	383	55
	8	—	3	6	9	16	22	37	53	82	109	140	221	31
	6	—	2	4	7	12	16	27	38	59	79	101	159	23
	4	—	1	2	4	7	10	16	23	36	48	62	98	14
	3	—	1	1	3	6	8	14	20	31	41	53	83	12
	2	—	1	1	3	5	7	11	17	26	34	44	70	10
	1	—	1	1	1	4	5	8	12	19	25	33	51	74
	1/0	—	1	1	1	3	4	7	10	16	21	27	43	63
	2/0	—	0	1	1	2	3	6	8	13	18	23	36	52
	3/0	—	0	1	1	1	3	5	7	11	15	19	30	43
	4/0	—	0	1	1	1	2	4	6	9	12	16	25	36
	250	—	0	0	1	1	1	3	5	7	10	13	20	29
	300	—	0	0	1	1	1	3	4	6	8	11	17	25
	350	—	0	0	1	1	1	2	3	5	7	10	15	22
	400	—	0	0	1	1	1	2	3	5	7	8	13	20
	500	—	0	0	0	1	1	1	2	4	5	7	11	16
	600	—	0	0	0	1	1	1	1	3	4	6	9	13
	700	—	0	0	0	1	1	1	1	3	4	5	8	11
	750	—	0	0	0	0	1	1	1	3	4	5	7	11
	800	—	0	0	0	0	1	1	1	2	3	4	7	10
	900	—	0	0	0	0	1	1	1	2	3	4	6	9
	1000	—	0	0	0	0	1	1	1	1	3	4	6	8
FEP, FEPB, PFA,	14	—	12	22	35	61	83	136	194	300	400	515	808	11
	12	—	9	16	26	44	60	99	142	219	292	376	590	85
	10	—	6	11	18	32	43	71	102	157	209	269	423	61

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$ (27)	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$ (53)	$2\frac{1}{2}$ (63)	$\frac{3}{78}$ (78)	$3\frac{1}{2}$ (91)	$\frac{4}{103}$ (103)	$\frac{5}{129}$ (129)	(1)
PFAH, TFE	8	—	3	6	10	18	25	41	58	90	120	154	242	35
	6	—	2	4	7	13	17	29	41	64	85	110	172	24
	4	—	1	3	5	9	12	20	29	44	59	77	120	17
	3	—	1	2	4	7	10	17	24	37	50	64	100	14
	2	—	1	1	3	6	8	14	20	31	41	53	83	12
PFA, PFAH, TFE	1	—	1	1	2	4	6	9	14	21	28	37	57	83
PFA, PFAH, TFE, Z	1/0	—	1	1	1	3	5	8	11	18	24	30	48	69
	2/0	—	1	1	1	3	4	6	9	14	19	25	40	57
	3/0	—	0	1	1	2	3	5	8	12	16	21	33	47
	4/0	—	0	1	1	1	2	4	6	10	13	17	27	39
Z	14	—	15	26	42	73	100	164	234	361	482	621	974	14
	12	—	10	18	30	52	71	116	166	256	342	440	691	99
	10	—	6	11	18	32	43	71	102	157	209	269	423	61
	8	—	4	7	11	20	27	45	64	99	132	170	267	38
	6	—	3	5	8	14	19	31	45	69	93	120	188	27
	4	—	1	3	5	9	13	22	31	48	64	82	129	18
	3	—	1	2	4	7	9	16	22	35	47	60	94	13
	2	—	1	1	3	6	8	13	19	29	39	50	78	11
	1	—	1	1	2	5	6	10	15	23	31	40	63	92
XHHW, ZW, XHHW-2, XHH	14	—	9	15	25	44	59	98	140	215	288	370	581	83
	12	—	7	12	19	33	45	75	107	165	221	284	446	64
	10	—	5	9	14	25	34	56	80	123	164	212	332	48
	8	—	3	5	8	14	19	31	44	68	91	118	185	26
	6	—	1	3	6	10	14	23	33	51	68	87	137	19
	4	—	1	2	4	7	10	16	24	37	49	63	99	14
	3	—	1	1	3	6	8	14	20	31	41	53	84	12
	2	—	1	1	3	5	7	12	17	26	35	45	70	10
	1	—	1	1	1	4	5	9	12	19	26	33	52	76
XHHW, XHHW-2, XHH	1/0	—	1	1	1	3	4	7	10	16	22	28	44	64
	2/0	—	0	1	1	2	3	6	9	13	18	23	37	53
	3/0	—	0	1	1	1	3	5	7	11	15	19	30	44
	4/0	—	0	1	1	1	2	4	6	9	12	16	25	36
	250	—	0	0	1	1	1	3	5	7	10	13	20	30
	300	—	0	0	1	1	1	3	4	6	9	11	18	25
	350	—	0	0	1	1	1	2	3	6	7	10	15	22
	400	—	0	0	1	1	1	2	3	5	7	9	14	20
	500	—	0	0	0	1	1	1	2	4	5	7	11	16
	600	—	0	0	0	1	1	1	1	3	4	6	9	13
	700	—	0	0	0	1	1	1	1	3	4	5	8	11
	750	—	0	0	0	0	1	1	1	3	4	5	7	11
	800	—	0	0	0	0	1	1	1	2	3	4	7	10
	900	—	0	0	0	0	1	1	1	2	3	4	6	9
	1000	—	0	0	0	0	1	1	1	1	3	4	6	8

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$	(1
	1250	—	0	0	0	0	0	1	1	1	2	3	4	6
	1500	—	0	0	0	0	0	1	1	1	1	2	4	5
	1750	—	0	0	0	0	0	0	1	1	1	1	3	5
	2000	—	0	0	0	0	0	0	1	1	1	1	3	4
FIXTURE WIRES														
RFH-2, FFH-2, RFHH-2	18	—	8	15	24	42	57	94	134	207	276	355	557	80
	16	—	7	12	20	35	48	79	113	174	232	299	470	67
SF-2, SFF-2	18	—	11	19	31	53	72	118	169	261	348	448	703	10
	16	—	9	15	25	44	59	98	140	215	288	370	581	83
	14	—	7	12	20	35	48	79	113	174	232	299	470	67
SF-1, SFF-1	18	—	19	33	54	94	127	209	299	461	616	792	1244	17
RFH-1, TF, TFF, XF, XFF	18	—	14	25	40	69	94	155	221	341	455	585	918	13
	16	—	11	20	32	56	76	125	178	275	367	472	741	10
XF, XFF	14	—	9	15	25	44	59	98	140	215	288	370	581	83
TFN, TFFN	18	—	23	40	64	111	150	248	354	545	728	937	1470	21
	16	—	17	30	49	84	115	189	270	416	556	715	1123	16
PF, PFF, PGF, PGFF, PAF, PTF, PTFF, PAFF	18	—	21	38	61	105	143	235	335	517	690	888	1394	20
	16	—	16	29	47	81	110	181	259	400	534	687	1078	15
	14	—	12	22	35	61	83	136	194	300	400	515	808	11
ZF, ZFF, ZHF	18	—	28	49	79	135	184	303	432	666	889	1145	1796	25
	16	—	20	36	58	100	136	223	319	491	656	844	1325	19
	14	—	15	26	42	73	100	164	234	361	482	621	974	14
KF-2, KFF-2	18	—	42	73	118	203	276	454	648	1000	1334	1717	2695	38
	16	—	29	51	82	142	192	317	452	697	931	1198	1880	27
	14	—	19	34	55	95	129	213	304	468	625	805	1263	18
	12	—	13	24	38	66	90	148	211	326	435	560	878	12
	10	—	9	15	25	44	59	98	140	215	288	370	581	83
KF-1, KFF-1	18	—	48	84	136	234	318	524	748	1153	1540	1982	3109	44
	16	—	34	59	96	165	224	368	526	810	1082	1392	2185	31
	14	—	23	40	64	111	150	248	354	545	728	937	1470	21
	12	—	15	26	42	73	100	164	234	361	482	621	974	14
	10	—	10	17	28	48	65	107	153	236	315	405	636	91
XF, XFF	12	—	5	8	13	23	32	52	75	115	154	198	311	44
	10	—	3	6	10	18	25	41	58	90	120	154	242	35

Notes:

1. This table is for concentric stranded conductors only. For compact stranded conductors, Table C.8(A) should be used.
2. Two-hour fire-rated RHH cable has ceramifiable insulation, which has much larger diameters than other RHH wires. Consult manufacturer's conduit fill tables.

*Types RHH, RHW, and RHW-2 without outer covering.

Table C.9(A) Maximum Number of Conductors or Fixture Wires in Rigid Metal Conduit (RMC) (Based on Chapter 9: Table 1, Table 4, and Table 5A)

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$ (27)	$\frac{1}{4}$ (35)	$\frac{1}{2}$ (41)	$\frac{2}{53}$ (53)	$\frac{2}{2}$ (63)	$\frac{3}{78}$ (78)	$\frac{3}{2}$ (91)	$\frac{4}{103}$ (103)	$\frac{5}{129}$ (129)	$\frac{6}{150}$ (150)
COMPACT CONDUCTORS														
THW, THW-2, THHW	8	—	2	4	7	12	16	26	38	59	78	101	158	228
	6	—	1	3	5	9	12	20	29	45	60	78	122	176
	4	—	1	2	4	7	9	15	22	34	45	58	91	132
	2	—	1	1	3	5	7	11	16	25	33	43	67	97
	1	—	1	1	1	3	5	8	11	17	23	30	47	68
	1/0	—	1	1	1	3	4	7	10	15	20	26	41	59
	2/0	—	0	1	1	2	3	6	8	13	17	22	34	50
	3/0	—	0	1	1	1	3	5	7	11	14	19	29	42
	4/0	—	0	1	1	1	2	4	6	9	12	15	24	35
	250	—	0	0	1	1	1	3	4	7	9	12	19	28
	300	—	0	0	1	1	1	3	4	6	8	11	17	24
	350	—	0	0	1	1	1	2	3	5	7	9	15	22
	400	—	0	0	1	1	1	1	3	5	7	8	13	20
	500	—	0	0	0	1	1	1	3	4	5	7	11	17
	600	—	0	0	0	1	1	1	1	3	4	6	9	13
	700	—	0	0	0	1	1	1	1	3	4	5	8	12
	750	—	0	0	0	0	1	1	1	3	4	5	7	11
	900	—	0	0	0	0	1	1	1	2	3	4	7	10
	1000	—	0	0	0	0	1	1	1	1	3	4	6	9
THHN, THWN, THWN-2	8	—	—	—	—	—	—	—	—	—	—	—	—	—
	6	—	2	5	8	13	18	30	43	66	88	114	179	258
	4	—	1	3	5	8	11	18	26	41	55	70	110	159
	2	—	1	1	3	6	8	13	19	29	39	50	79	114
	1	—	1	1	2	4	6	10	14	22	29	38	59	86
	1/0	—	1	1	1	4	5	8	12	19	25	32	51	73
	2/0	—	1	1	1	3	4	7	10	15	21	26	42	60
	3/0	—	0	1	1	2	3	6	8	13	17	22	35	51
	4/0	—	0	1	1	1	3	5	7	10	14	18	29	42
	250	—	0	1	1	1	2	4	5	8	11	14	23	33
	300	—	0	0	1	1	1	3	4	7	10	12	20	28
	350	—	0	0	1	1	1	3	4	6	8	11	17	25
	400	—	0	0	1	1	1	2	3	5	7	10	15	22
	500	—	0	0	0	1	1	1	3	5	6	8	13	19
	600	—	0	0	0	1	1	1	2	4	5	6	10	15
	700	—	0	0	0	1	1	1	1	3	4	6	9	13
	750	—	0	0	0	1	1	1	1	3	4	5	9	13
	900	—	0	0	0	0	1	1	1	2	3	4	7	10
	1000	—	0	0	0	0	1	1	1	2	3	4	6	9
XHHW, XHHW-2	8	—	3	5	9	15	21	34	49	76	101	130	205	296
	6	—	2	4	6	11	15	25	36	56	75	97	152	220
	4	—	1	3	5	8	11	18	26	41	55	70	110	159
	2	—	1	1	3	6	8	13	19	29	39	50	79	114
	1	—	1	1	2	4	6	10	14	22	29	38	59	86
	1/0	—	1	1	1	4	5	8	12	19	25	32	51	73
	2/0	—	1	1	1	3	4	7	10	16	21	27	43	62

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$ (27)	$\frac{1}{4}$ (35)	$\frac{1}{2}$ (41)	$\frac{2}{53}$ (53)	$\frac{2}{2}$ (63)	$\frac{3}{78}$ (78)	$\frac{3}{2}$ (91)	$\frac{4}{103}$ (103)	$\frac{5}{129}$ (129)	$\frac{6}{147}$ (147)
	3/0	—	0	1	1	2	3	6	8	13	17	22	35	51
	4/0	—	0	1	1	1	3	5	7	11	14	19	29	42
	250	—	0	1	1	1	2	4	5	8	11	15	23	34
	300	—	0	0	1	1	1	3	5	7	10	13	20	29
	350	—	0	0	1	1	1	3	4	6	9	11	18	25
	400	—	0	0	1	1	1	2	4	6	8	10	16	23
	500	—	0	0	0	1	1	1	3	5	6	8	13	19
	600	—	0	0	0	1	1	1	2	4	5	7	10	15
	700	—	0	0	0	1	1	1	1	3	4	6	9	13
	750	—	0	0	0	1	1	1	1	3	4	5	8	12
	900	—	0	0	0	0	1	1	1	2	3	5	7	11
	1000	—	0	0	0	0	1	1	1	2	3	4	7	10

Definition: *Compact stranding* is the result of a manufacturing process where the stranded conductor is compressed to the extent that the interstices (voids between strand wires) are virtually eliminated.

Table C.10 Maximum Number of Conductors or Fixture Wires in Rigid PVC Conduit, Schedule 80 (Based on Chapter 9: Table 1, Table 4, and Table 5)

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		³ / ₈ (12)	¹ / ₂ (16)	³ / ₄ (21)	¹ (27)	¹ / ₄ (35)	¹ / ₂ (41)	² (53)	² / ₁ (63)	³ (78)	³ / ₂ (91)	⁴ (103)	⁵ (129)	⁶ (147)
CONDUCTORS														
RHH, RHW, RHW-2	14	—	3	5	9	17	23	39	56	88	118	153	243	348
	12	—	2	4	7	14	19	32	46	73	98	127	202	294
	10	—	1	3	6	11	15	26	37	59	79	103	163	237
	8	—	1	1	3	6	8	13	19	31	41	54	85	121
	6	—	1	1	2	4	6	11	16	24	33	43	68	98
	4	—	1	1	1	3	5	8	12	19	26	33	53	77
	3	—	0	1	1	3	4	7	11	17	23	29	47	67
	2	—	0	1	1	3	4	6	9	14	20	25	41	58
	1	—	0	1	1	1	2	4	6	9	13	17	27	38
	1/0	—	0	0	1	1	1	3	5	8	11	15	23	33
	2/0	—	0	0	1	1	1	3	4	7	10	13	20	29
	3/0	—	0	0	1	1	1	3	4	6	8	11	17	25
	4/0	—	0	0	0	1	1	2	3	5	7	9	15	21
	250	—	0	0	0	1	1	1	2	4	5	7	11	16
	300	—	0	0	0	1	1	1	2	3	5	6	10	14
	350	—	0	0	0	1	1	1	1	3	4	5	9	13
	400	—	0	0	0	0	1	1	1	3	4	5	8	12
	500	—	0	0	0	0	1	1	1	2	3	4	7	10
	600	—	0	0	0	0	0	1	1	1	3	3	6	8
	700	—	0	0	0	0	0	1	1	1	2	3	5	7
	750	—	0	0	0	0	0	1	1	1	2	3	5	7
	800	—	0	0	0	0	0	1	1	1	2	3	4	7
	900	—	0	0	0	0	0	1	1	1	1	2	4	6
	1000	—	0	0	0	0	0	1	1	1	1	2	4	5
	1250	—	0	0	0	0	0	0	1	1	1	1	3	4

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$	(1
	1500	—	0	0	0	0	0	0	1	1	1	1	2	4
	1750	—	0	0	0	0	0	0	0	1	1	1	2	3
	2000	—	0	0	0	0	0	0	0	1	1	1	1	3
TW, THHW, THW, THW-2	14	—	6	11	19	35	49	82	118	185	250	324	514	73
	12	—	4	9	15	27	38	63	91	142	192	248	394	56
	10	—	3	6	11	20	28	47	68	106	143	185	294	42
	8	—	1	3	6	11	15	26	37	59	79	103	163	23
RHH*, RHW*, RHW-2*	14	—	4	8	13	23	32	55	79	123	166	215	341	49
	12	—	3	6	10	19	26	44	63	99	133	173	274	39
	10	—	2	5	8	15	20	34	49	77	104	135	214	30
	8	—	1	3	5	9	12	20	29	46	62	81	128	18
TW, THW, THHW, THW-2, RHH*, RHW*, RHW-2*	6	—	1	1	3	7	9	16	22	35	48	62	98	14
	4	—	1	1	3	5	7	12	17	26	35	46	73	10
	3	—	1	1	2	4	6	10	14	22	30	39	63	90
	2	—	1	1	1	3	5	8	12	19	26	33	53	77
	1	—	0	1	1	2	3	6	8	13	18	23	37	54
	1/0	—	0	1	1	1	3	5	7	11	15	20	32	46
	2/0	—	0	1	1	1	2	4	6	10	13	17	27	39
	3/0	—	0	0	1	1	1	3	5	8	11	14	23	33
	4/0	—	0	0	1	1	1	3	4	7	9	12	19	27
	250	—	0	0	0	1	1	2	3	5	7	9	15	22
	300	—	0	0	0	1	1	1	3	5	6	8	13	19
	350	—	0	0	0	1	1	1	2	4	6	7	12	17
	400	—	0	0	0	1	1	1	2	4	5	7	10	15
	500	—	0	0	0	1	1	1	1	3	4	5	9	13
	600	—	0	0	0	0	1	1	1	2	3	4	7	10
	700	—	0	0	0	0	1	1	1	2	3	4	6	9
	750	—	0	0	0	0	0	1	1	1	3	4	6	8
	800	—	0	0	0	0	0	1	1	1	3	3	6	8
	900	—	0	0	0	0	0	1	1	1	2	3	5	7
	1000	—	0	0	0	0	0	1	1	1	2	3	5	7
	1250	—	0	0	0	0	0	1	1	1	1	2	4	5
	1500	—	0	0	0	0	0	0	1	1	1	1	3	4
	1750	—	0	0	0	0	0	0	1	1	1	1	3	4
	2000	—	0	0	0	0	0	0	0	1	1	1	2	3
THHN, THWN, THWN-2	14	—	9	17	28	51	70	118	170	265	358	464	736	10
	12	—	6	12	20	37	51	86	124	193	261	338	537	77
	10	—	4	7	13	23	32	54	78	122	164	213	338	48
	8	—	2	4	7	13	18	31	45	70	95	123	195	27
	6	—	1	3	5	9	13	22	32	51	68	89	141	20
	4	—	1	1	3	6	8	14	20	31	42	54	86	12
	3	—	1	1	3	5	7	12	17	26	35	46	73	10
	2	—	1	1	2	4	6	10	14	22	30	39	61	88
	1	—	0	1	1	3	4	7	10	16	22	29	45	65
	1/0	—	0	1	1	2	3	6	9	14	18	24	38	55

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$	(1
	2/0	—	0	1	1	1	3	5	7	11	15	20	32	46
	3/0	—	0	1	1	1	2	4	6	9	13	17	26	38
	4/0	—	0	0	1	1	1	3	5	8	10	14	22	31
	250	—	0	0	1	1	1	3	4	6	8	11	18	25
	300	—	0	0	0	1	1	2	3	5	7	9	15	22
	350	—	0	0	0	1	1	1	3	5	6	8	13	19
	400	—	0	0	0	1	1	1	3	4	6	7	12	17
	500	—	0	0	0	1	1	1	2	3	5	6	10	14
	600	—	0	0	0	0	1	1	1	3	4	5	8	12
	700	—	0	0	0	0	1	1	1	2	3	4	7	10
	750	—	0	0	0	0	1	1	1	2	3	4	7	9
	800	—	0	0	0	0	1	1	1	2	3	4	6	9
	900	—	0	0	0	0	0	1	1	1	3	3	6	8
	1000	—	0	0	0	0	0	1	1	1	2	3	5	7
FEP, FEPB, PFA, PFAH, TFE	14	—	8	16	27	49	68	115	164	257	347	450	714	10
	12	—	6	12	20	36	50	84	120	188	253	328	521	74
	10	—	4	8	14	26	36	60	86	135	182	235	374	53
	8	—	2	5	8	15	20	34	49	77	104	135	214	30
	6	—	1	3	6	10	14	24	35	55	74	96	152	21
	4	—	1	2	4	7	10	17	24	38	52	67	106	15
	3	—	1	1	3	6	8	14	20	32	43	56	89	12
	2	—	1	1	3	5	7	12	17	26	35	46	73	10
PFA, PFAH, TFE	1	—	1	1	1	3	5	8	11	18	25	32	51	73
PFA, PFAH, TFE, Z	1/0	—	0	1	1	3	4	7	10	15	20	27	42	61
	2/0	—	0	1	1	2	3	5	8	12	17	22	35	50
	3/0	—	0	1	1	1	2	4	6	10	14	18	29	41
	4/0	—	0	0	1	1	1	4	5	8	11	15	24	34
Z	14	—	10	19	33	59	82	138	198	310	418	542	860	12
	12	—	7	14	23	42	58	98	141	220	297	385	610	87
	10	—	4	8	14	26	36	60	86	135	182	235	374	53
	8	—	3	5	9	16	22	38	54	85	115	149	236	33
	6	—	1	4	6	11	16	26	38	60	81	104	166	23
	4	—	1	2	4	8	11	18	26	41	55	72	114	16
	3	—	1	1	3	5	8	13	19	30	40	52	83	11
	2	—	1	1	2	5	6	11	16	25	33	43	69	99
	1	—	1	1	1	4	5	9	13	20	27	35	56	80
XHHW, ZW, XHHW-2, XHH	14	—	6	11	19	35	49	82	118	185	250	324	514	73
	12	—	4	9	15	27	38	63	91	142	192	248	394	56
	10	—	3	6	11	20	28	47	68	106	143	185	294	42
	8	—	1	3	6	11	15	26	37	59	79	103	163	23
	6	—	1	2	4	8	11	19	28	43	59	76	121	17
	4	—	1	1	3	6	8	14	20	31	42	55	87	12
	3	—	1	1	3	5	7	12	17	26	36	47	74	10
	2	—	1	1	2	4	6	10	14	22	30	39	62	89

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$	(1
XHHW, XHHW-2, XHH	1	—	0	1	1	3	4	7	10	16	22	29	46	66
	1/0	—	0	1	1	2	3	6	9	14	19	24	39	56
	2/0	—	0	1	1	1	3	5	7	11	16	20	32	46
	3/0	—	0	1	1	1	2	4	6	9	13	17	27	38
	4/0	—	0	0	1	1	1	3	5	8	11	14	22	32
	250	—	0	0	1	1	1	3	4	6	9	11	18	26
	300	—	0	0	1	1	1	2	3	5	7	10	15	22
	350	—	0	0	0	1	1	1	3	5	6	8	14	20
	400	—	0	0	0	1	1	1	3	4	6	7	12	17
	500	—	0	0	0	1	1	1	2	3	5	6	10	14
	600	—	0	0	0	0	1	1	1	3	4	5	8	11
	700	—	0	0	0	0	1	1	1	2	3	4	7	10
	750	—	0	0	0	0	1	1	1	2	3	4	6	9
	800	—	0	0	0	0	1	1	1	1	3	4	6	9
	900	—	0	0	0	0	0	1	1	1	3	3	5	8
	1000	—	0	0	0	0	0	1	1	1	2	3	5	7
	1250	—	0	0	0	0	0	1	1	1	1	2	4	6
	1500	—	0	0	0	0	0	0	1	1	1	1	3	5
	1750	—	0	0	0	0	0	0	1	1	1	1	3	4
	2000	—	0	0	0	0	0	0	1	1	1	1	2	4
FIXTURE WIRES														
RFH-2, FFH-2, RFHH-2	18	—	6	11	19	34	47	79	113	177	239	310	492	70
	16	—	5	9	16	28	39	67	95	150	202	262	415	59
SF-2, SFF-2	18	—	7	14	24	43	59	100	143	224	302	391	621	89
	16	—	6	11	19	35	49	82	118	185	250	324	514	73
	14	—	5	9	16	28	39	67	95	150	202	262	415	59
SF-1, SFF-1	18	—	13	25	42	76	105	177	253	396	534	692	1098	15
RFH-1, TF, TFF, XF, XFF	18	—	10	18	31	56	77	130	187	293	395	511	811	11
	16	—	8	15	25	45	62	105	151	236	319	413	655	93
XF, XFF	14	—	6	11	19	35	49	82	118	185	250	324	514	73
TFN, TFFN	18	—	15	29	50	90	124	209	299	468	632	818	1298	18
	16	—	12	22	38	68	95	159	229	358	482	625	992	14
PF, PFF, PGF, PGFF, PAF, PTF, PTFF, PAFF	18	—	15	28	47	85	118	198	284	444	599	776	1231	17
	16	—	11	22	36	66	91	153	219	343	463	600	952	13
	14	—	8	16	27	49	68	115	164	257	347	450	714	10
ZF, ZFF, ZHF	18	—	19	36	61	110	152	255	366	572	772	1000	1587	22
	16	—	14	27	45	81	112	188	270	422	569	738	1171	16
	14	—	10	19	33	59	82	138	198	310	418	542	860	12
KF-2, KFF-2	18	—	29	54	91	165	228	383	549	859	1158	1501	2380	34
	16	—	20	38	64	115	159	267	383	599	808	1047	1661	23
	14	—	13	25	43	77	107	179	257	402	543	703	1116	16

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$	(1
	12	—	9	17	30	53	74	125	179	280	377	489	776	11
	10	—	6	11	19	35	49	82	118	185	250	324	514	73
KF-1, KFF-1	18	—	33	63	106	190	263	442	633	991	1336	1732	2747	39
	16	—	23	44	74	133	185	310	445	696	939	1217	1930	27
	14	—	15	29	50	90	124	209	299	468	632	818	1298	18
	12	—	10	19	33	59	82	138	198	310	418	542	860	12
	10	—	7	13	21	39	54	90	129	203	273	354	562	80
XF, XFF	12	—	3	6	10	19	26	44	63	99	133	173	274	39
	10	—	2	5	8	15	20	34	49	77	104	135	214	30

Notes:

1. This table is for concentric stranded conductors only. For compact stranded conductors, Table C.9(A) should be used.

2. Two-hour fire-rated RHH cable has ceramifiable insulation, which has much larger diameters than other RHH wires. Consult manufacturer's conduit fill tables.

*Types RHH, RHW, and RHW-2 without outer covering.

Table C.10(A) Maximum Number of Conductors or Fixture Wires in Rigid PVC Conduit, Schedule 80
(Based on Chapter 9: Table 1, Table 4, and Table 5A)

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$	$\frac{1}{16}$ (4)
COMPACT CONDUCTORS														
THW, THW-2, THHW	8	—	1	3	5	9	13	22	32	50	68	88	140	200
	6	—	1	2	4	7	10	17	25	39	52	68	108	155
	4	—	1	1	3	5	7	13	18	29	39	51	81	116
	2	—	1	1	1	4	5	9	13	21	29	37	60	85
	1	—	0	1	1	3	4	6	9	15	20	26	42	60
	1/0	—	0	1	1	2	3	6	8	13	17	23	36	52
	2/0	—	0	1	1	1	3	5	7	11	15	19	30	44
	3/0	—	0	0	1	1	2	4	6	9	12	16	26	37
	4/0	—	0	0	1	1	1	3	5	8	10	13	22	31
	250	—	0	0	1	1	1	2	4	6	8	11	17	25
	300	—	0	0	0	1	1	2	3	5	7	9	15	21
	350	—	0	0	0	1	1	1	3	5	6	8	13	19
	400	—	0	0	0	1	1	1	3	4	6	7	12	17
	500	—	0	0	0	1	1	1	2	3	5	6	10	14
	600	—	0	0	0	0	1	1	1	3	4	5	8	12
	700	—	0	0	0	0	1	1	1	2	3	4	7	10
	750	—	0	0	0	0	1	1	1	2	3	4	7	10
	900	—	0	0	0	0	0	1	1	1	3	4	6	8
	1000	—	0	0	0	0	0	1	1	1	2	3	5	8
THHN, THWN, THWN-2	8	—	—	—	—	—	—	—	—	—	—	—	—	—
	6	—	1	3	6	11	15	25	36	57	77	99	158	220
	4	—	1	1	3	6	9	15	22	35	47	61	98	140
	2	—	1	1	2	5	6	11	16	25	34	44	70	100
	1	—	1	1	1	3	5	8	12	19	25	33	53	75

Type	Conductor Size (AWG/kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$ (27)	$\frac{1}{4}$ (35)	$\frac{1}{2}$ (41)	$\frac{2}{53}$ (53)	$\frac{2}{2}$ (63)	$\frac{3}{78}$ (78)	$\frac{3}{2}$ (91)	$\frac{4}{103}$ (103)	$\frac{5}{129}$ (129)	$\frac{6}{146}$ (146)
	1/0	—	0	1	1	3	4	7	10	16	22	28	45	64
	2/0	—	0	1	1	2	3	6	8	13	18	23	37	53
	3/0	—	0	1	1	1	3	5	7	11	15	19	31	44
	4/0	—	0	0	1	1	2	4	6	9	12	16	25	37
	250	—	0	0	1	1	1	3	4	7	10	12	20	29
	300	—	0	0	1	1	1	3	4	6	8	11	17	25
	350	—	0	0	0	1	1	2	3	5	7	9	15	22
	400	—	0	0	0	1	1	1	3	5	6	8	13	19
	500	—	0	0	0	1	1	1	2	4	5	7	11	16
	600	—	0	0	0	1	1	1	1	3	4	6	9	13
	700	—	0	0	0	0	1	1	1	3	4	5	8	12
	750	—	0	0	0	0	1	1	1	3	4	5	8	11
	900	—	0	0	0	0	1	1	1	1	3	4	6	9
	1000	—	0	0	0	0	0	1	1	1	3	3	5	8
XHHW, XHHW-2	8	—	1	4	7	12	17	29	42	65	88	114	181	260
	6	—	1	3	5	9	13	21	31	48	65	85	134	193
	4	—	1	1	3	6	9	15	22	35	47	61	98	140
	2	—	1	1	2	5	6	11	16	25	34	44	70	100
	1	—	1	1	1	3	5	8	12	19	25	33	53	75
	1/0	—	0	1	1	3	4	7	10	16	22	28	45	64
	2/0	—	0	1	1	2	3	6	8	13	18	24	38	54
	3/0	—	0	1	1	1	3	5	7	11	15	19	31	44
	4/0	—	0	0	1	1	2	4	6	9	12	16	26	37
	250	—	0	0	1	1	1	3	5	7	10	13	21	30
	300	—	0	0	1	1	1	3	4	6	8	11	17	25
	350	—	0	0	1	1	1	2	3	5	7	10	15	22
	400	—	0	0	0	1	1	1	3	5	7	9	14	20
	500	—	0	0	0	1	1	1	2	4	5	7	11	17
	600	—	0	0	0	1	1	1	1	3	4	6	9	13
	700	—	0	0	0	0	1	1	1	3	4	5	8	12
	750	—	0	0	0	0	1	1	1	2	3	5	7	11
	900	—	0	0	0	0	1	1	1	2	3	4	6	9
	1000	—	0	0	0	0	0	1	1	1	3	3	6	8

Definition: *Compact stranding* is the result of a manufacturing process where the stranded conductor is compressed to the extent that the interstices (voids between strand wires) are virtually eliminated.

Table C.11 Maximum Number of Conductors or Fixture Wires in Rigid PVC Conduit, Schedule 40 and HDPE Conduit (Based on Chapter 9: Table 1, Table 4, and Table 5)

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$ (27)	$\frac{1}{4}$ (35)	$\frac{1}{2}$ (41)	$\frac{2}{53}$ (53)	$2\frac{1}{2}$ (63)	$\frac{3}{78}$ (78)	$3\frac{1}{2}$ (91)	$\frac{4}{103}$ (103)	$\frac{5}{129}$ (129)	$\frac{6}{146}$ (146)
CONDUCTORS														
RHH, RHW, RHW-2	14	—	4	7	11	20	27	45	64	99	133	171	269	392
	12	—	3	5	9	16	22	37	53	82	110	142	224	320
	10	—	2	4	7	13	18	30	43	66	89	115	181	260
	8	—	1	2	4	7	9	15	22	35	46	60	94	130

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$	(1
	6	—	1	1	3	5	7	12	18	28	37	48	76	10
	4	—	1	1	2	4	6	10	14	22	29	37	59	85
	3	—	1	1	1	4	5	8	12	19	25	33	52	75
	2	—	1	1	1	3	4	7	10	16	22	28	45	65
	1	—	0	1	1	1	3	5	7	11	14	19	29	43
	1/0	—	0	1	1	1	2	4	6	9	13	16	26	37
	2/0	—	0	0	1	1	1	3	5	8	11	14	22	32
	3/0	—	0	0	1	1	1	3	4	7	9	12	19	28
	4/0	—	0	0	1	1	1	2	4	6	8	10	16	24
	250	—	0	0	0	1	1	1	3	4	6	8	12	18
	300	—	0	0	0	1	1	1	2	4	5	7	11	16
	350	—	0	0	0	1	1	1	2	3	5	6	10	14
	400	—	0	0	0	1	1	1	1	3	4	6	9	13
	500	—	0	0	0	0	1	1	1	3	4	5	8	11
	600	—	0	0	0	0	1	1	1	2	3	4	6	9
	700	—	0	0	0	0	0	1	1	1	3	3	6	8
	750	—	0	0	0	0	0	1	1	1	2	3	5	8
	800	—	0	0	0	0	0	1	1	1	2	3	5	7
	900	—	0	0	0	0	0	1	1	1	2	3	5	7
	1000	—	0	0	0	0	0	1	1	1	1	3	4	6
	1250	—	0	0	0	0	0	0	1	1	1	1	3	5
	1500	—	0	0	0	0	0	0	1	1	1	1	3	4
	1750	—	0	0	0	0	0	0	1	1	1	1	2	3
	2000	—	0	0	0	0	0	0	0	1	1	1	2	3
TW, THHW, THW, THW-2	14	—	8	14	24	42	57	94	135	209	280	361	568	82
	12	—	6	11	18	32	44	72	103	160	215	277	436	63
	10	—	4	8	13	24	32	54	77	119	160	206	325	47
	8	—	2	4	7	13	18	30	43	66	89	115	181	26
RHH*, RHW*, RHW-2*	14	—	5	9	16	28	38	63	90	139	186	240	378	54
	12	—	4	8	13	22	30	50	72	112	150	193	304	43
	10	—	3	6	10	17	24	39	56	87	117	150	237	34
	8	—	1	3	6	10	14	23	33	52	70	90	142	20
TW, THW, THHW, THW-2, RHH*, RHW*, RHW-2*	6	—	1	2	4	8	11	18	26	40	53	69	109	15
	4	—	1	1	3	6	8	13	19	30	40	51	81	11
	3	—	1	1	3	5	7	11	16	25	34	44	69	10
	2	—	1	1	2	4	6	10	14	22	29	37	59	85
	1	—	0	1	1	3	4	7	10	15	20	26	41	60
	1/0	—	0	1	1	2	3	6	8	13	17	22	35	51
	2/0	—	0	1	1	1	3	5	7	11	15	19	30	43
	3/0	—	0	1	1	1	2	4	6	9	12	16	25	36
	4/0	—	0	0	1	1	1	3	5	8	10	13	21	30
	250	—	0	0	1	1	1	3	4	6	8	11	17	25
	300	—	0	0	1	1	1	2	3	5	7	9	15	21
	350	—	0	0	0	1	1	1	3	5	6	8	13	19
	400	—	0	0	0	1	1	1	3	4	6	7	12	17

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$	(1
THHN, THWN, THWN-2	500	—	0	0	0	1	1	1	2	3	5	6	10	14
	600	—	0	0	0	0	1	1	1	3	4	5	8	11
	700	—	0	0	0	0	1	1	1	2	3	4	7	10
	750	—	0	0	0	0	1	1	1	2	3	4	6	10
	800	—	0	0	0	0	1	1	1	2	3	4	6	9
	900	—	0	0	0	0	0	1	1	1	3	3	6	8
	1000	—	0	0	0	0	0	1	1	1	2	3	5	7
	1250	—	0	0	0	0	0	1	1	1	1	2	4	6
	1500	—	0	0	0	0	0	1	1	1	1	1	3	5
	1750	—	0	0	0	0	0	0	1	1	1	1	3	4
	2000	—	0	0	0	0	0	0	1	1	1	1	3	4
	14	—	11	21	34	60	82	135	193	299	401	517	815	11
	12	—	8	15	25	43	59	99	141	218	293	377	594	85
	10	—	5	9	15	27	37	62	89	137	184	238	374	54
	8	—	3	5	9	16	21	36	51	79	106	137	216	31
	6	—	1	4	6	11	15	26	37	57	77	99	156	22
	4	—	1	2	4	7	9	16	22	35	47	61	96	13
	3	—	1	1	3	6	8	13	19	30	40	51	81	11
	2	—	1	1	3	5	7	11	16	25	33	43	68	98
	1	—	1	1	1	3	5	8	12	18	25	32	50	73
	1/0	—	1	1	1	3	4	7	10	15	21	27	42	61
	2/0	—	0	1	1	2	3	6	8	13	17	22	35	51
	3/0	—	0	1	1	1	3	5	7	11	14	18	29	42
	4/0	—	0	1	1	1	2	4	6	9	12	15	24	35
FEP, FEPB, PFA, PFAH, TFE	250	—	0	0	1	1	1	3	4	7	10	12	20	28
	300	—	0	0	1	1	1	3	4	6	8	11	17	24
	350	—	0	0	1	1	1	2	3	5	7	9	15	21
	400	—	0	0	0	1	1	1	3	5	6	8	13	19
	500	—	0	0	0	1	1	1	2	4	5	7	11	16
	600	—	0	0	0	1	1	1	1	3	4	5	9	13
	700	—	0	0	0	0	1	1	1	3	4	5	8	11
	750	—	0	0	0	0	1	1	1	2	3	4	7	11
	800	—	0	0	0	0	1	1	1	2	3	4	7	10
	900	—	0	0	0	0	1	1	1	2	3	4	6	9
	1000	—	0	0	0	0	0	1	1	1	3	3	6	8
	14	—	11	20	33	58	79	131	188	290	389	502	790	11
	12	—	8	15	24	42	58	96	137	212	284	366	577	83
	10	—	6	10	17	30	41	69	98	152	204	263	414	59
	8	—	3	6	10	17	24	39	56	87	117	150	237	34
	6	—	2	4	7	12	17	28	40	62	83	107	169	24
	4	—	1	3	5	8	12	19	28	43	58	75	118	17
	3	—	1	2	4	7	10	16	23	36	48	62	98	14
	2	—	1	1	3	6	8	13	19	30	40	51	81	11
	1	—	1	1	2	4	5	9	13	20	28	36	56	81
PFA, PFAH, TFE	1	—	1	1	2	4	5	9	13	20	28	36	56	81

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$	(1
PFA, PFAH, TFE, Z	1/0	—	1	1	1	3	4	8	11	17	23	30	47	68
	2/0	—	0	1	1	3	4	6	9	14	19	24	39	56
	3/0	—	0	1	1	2	3	5	7	12	16	20	32	46
	4/0	—	0	1	1	1	2	4	6	9	13	16	26	38
Z	14	—	13	24	40	70	95	158	226	350	469	605	952	13
	12	—	9	17	28	49	68	112	160	248	333	429	675	97
	10	—	6	10	17	30	41	69	98	152	204	263	414	59
	8	—	3	6	11	19	26	43	62	96	129	166	261	37
	6	—	2	4	7	13	18	30	43	67	90	116	184	26
	4	—	1	3	5	9	12	21	30	46	62	80	126	18
	3	—	1	2	4	6	9	15	22	34	45	58	92	13
	2	—	1	1	3	5	7	12	18	28	38	49	77	11
	1	—	1	1	2	4	6	10	14	23	30	39	62	90
	14	—	8	14	24	42	57	94	135	209	280	361	568	82
XHHW, ZW, XHHW-2, XHH	12	—	6	11	18	32	44	72	103	160	215	277	436	63
	10	—	4	8	13	24	32	54	77	119	160	206	325	47
	8	—	2	4	7	13	18	30	43	66	89	115	181	26
	6	—	1	3	5	10	13	22	32	49	66	85	134	19
	4	—	1	2	4	7	9	16	23	35	48	61	97	14
	3	—	1	1	3	6	8	13	19	30	40	52	82	11
	2	—	1	1	3	5	7	11	16	25	34	44	69	99
	1	—	1	1	1	3	5	8	12	19	25	32	51	74
	1/0	—	1	1	1	3	4	7	10	16	21	27	43	62
	2/0	—	0	1	1	2	3	6	8	13	17	23	36	52
XHHW, XHHW-2, XHH	3/0	—	0	1	1	1	3	5	7	11	14	19	30	43
	4/0	—	0	1	1	1	2	4	6	9	12	15	24	35
	250	—	0	0	1	1	1	3	5	7	10	13	20	29
	300	—	0	0	1	1	1	3	4	6	8	11	17	25
	350	—	0	0	1	1	1	2	3	5	7	9	15	22
	400	—	0	0	0	1	1	1	3	5	6	8	13	19
	500	—	0	0	0	1	1	1	2	4	5	7	11	16
	600	—	0	0	0	1	1	1	1	3	4	5	9	13
	700	—	0	0	0	0	1	1	1	3	4	5	8	11
	750	—	0	0	0	0	1	1	1	2	3	4	7	11
	800	—	0	0	0	0	1	1	1	2	3	4	7	10
	900	—	0	0	0	0	1	1	1	2	3	4	6	9
	1000	—	0	0	0	0	0	1	1	1	3	3	6	8
	1250	—	0	0	0	0	0	1	1	1	1	3	4	6
	1500	—	0	0	0	0	0	1	1	1	1	2	4	5
	1750	—	0	0	0	0	0	0	1	1	1	1	3	5
	2000	—	0	0	0	0	0	0	1	1	1	1	3	4
FIXTURE WIRES														
RFH-2, FFH-2, RFHH-2	18	—	8	14	23	40	54	90	129	200	268	346	545	78
	16	—	6	12	19	33	46	76	109	169	226	292	459	66
SF-2,	18	—	10	17	29	50	69	114	163	253	338	436	687	99

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$ (27)	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$ (53)	$2\frac{1}{2}$ (63)	$\frac{3}{78}$ (78)	$3\frac{1}{2}$ (91)	$\frac{4}{103}$ (103)	$\frac{5}{129}$ (129)	$\frac{6}{150}$ (150)
SFF-2	16	—	8	14	24	42	57	94	135	209	280	361	568	822
	14	—	6	12	19	33	46	76	109	169	226	292	459	660
SF-1, SFF-1	18	—	17	31	51	89	122	202	289	447	599	772	1216	1716
RFH-1, TF, TFF, XF, XFF	18	—	13	23	38	66	90	149	213	330	442	570	898	1216
	16	—	10	18	30	53	73	120	172	266	357	460	725	1016
XF, XFF	14	—	8	14	24	42	57	94	135	209	280	361	568	822
TFN, TFFN	18	—	20	37	60	105	144	239	341	528	708	913	1437	2016
	16	—	16	28	46	80	110	183	261	403	541	697	1098	1516
PF, PFF, PGF, PGFF, PAF, PTF, PTFF, PAFF	18	—	19	35	57	100	137	227	323	501	671	865	1363	1916
	16	—	15	27	44	77	106	175	250	387	519	669	1054	1516
	14	—	11	20	33	58	79	131	188	290	389	502	790	1116
ZF, ZFF, ZHF	18	—	25	45	74	129	176	292	417	646	865	1116	1756	2516
	16	—	18	33	54	95	130	216	308	476	638	823	1296	1816
	14	—	13	24	40	70	95	158	226	350	469	605	952	1316
KF-2, KFF-2	18	—	38	67	111	193	265	439	626	969	1298	1674	2634	3816
	16	—	26	47	77	135	184	306	436	676	905	1168	1838	2616
	14	—	18	31	52	91	124	205	293	454	608	784	1235	1716
	12	—	12	22	36	63	86	143	204	316	423	546	859	1216
	10	—	8	14	24	42	57	94	135	209	280	361	568	822
KF-1, KFF-1	18	—	44	78	128	223	305	506	722	1118	1498	1931	3040	4316
	16	—	31	55	90	157	214	355	507	785	1052	1357	2136	3016
	14	—	20	37	60	105	144	239	341	528	708	913	1437	2016
	12	—	13	24	40	70	95	158	226	350	469	605	952	1316
	10	—	9	16	26	45	62	103	148	229	306	395	622	8916
XF, XFF	12	—	4	8	13	22	30	50	72	112	150	193	304	4316
	10	—	3	6	10	17	24	39	56	87	117	150	237	3416

Notes:

1. This table is for concentric stranded conductors only. For compact stranded conductors, Table C.10(A) should be used.
2. Two-hour fire-rated RHH cable has ceramifiable insulation, which has much larger diameters than other RHH wires. Consult manufacturer's conduit fill tables.

*Types RHH, RHW, and RHW-2 without outer covering.

Table C.11(A) Maximum Number of Conductors or Fixture Wires in Rigid PVC Conduit, Schedule 40 and HDPE Conduit (Based on Chapter 9: Table 1, Table 4, and Table 5A)

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$ (27)	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$ (53)	$2\frac{1}{2}$ (63)	$\frac{3}{78}$ (78)	$3\frac{1}{2}$ (91)	$\frac{4}{103}$ (103)	$\frac{5}{129}$ (129)	$\frac{6}{150}$ (150)
		COMPACT CONDUCTORS												
THW, THW-2,	8	—	1	4	6	11	15	26	37	57	76	98	155	224
	6	—	1	3	5	9	12	20	28	44	59	76	119	173

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$ (27)	$\frac{1}{4}$ (35)	$\frac{1}{2}$ (41)	$\frac{2}{53}$ (53)	$\frac{2}{2}$ (63)	$\frac{3}{78}$ (78)	$\frac{3}{2}$ (91)	$\frac{4}{103}$ (103)	$\frac{5}{129}$ (129)	$\frac{6}{150}$ (150)
THHW	4	—	1	1	3	6	9	15	21	33	44	57	89	129
	2	—	1	1	2	5	6	11	15	24	32	42	66	95
	1	—	1	1	1	3	4	7	11	17	23	29	46	67
	1/0	—	0	1	1	3	4	6	9	15	20	25	40	58
	2/0	—	0	1	1	2	3	5	8	12	16	21	34	49
	3/0	—	0	1	1	1	3	5	7	10	14	18	29	42
	4/0	—	0	1	1	1	2	4	5	9	12	15	24	35
	250	—	0	0	1	1	1	3	4	7	9	12	19	27
	300	—	0	0	1	1	1	2	4	6	8	10	16	24
	350	—	0	0	1	1	1	2	3	5	7	9	15	21
	400	—	0	0	0	1	1	1	3	5	6	8	13	19
	500	—	0	0	0	1	1	1	2	4	5	7	11	16
	600	—	0	0	0	1	1	1	1	3	4	5	9	13
	700	—	0	0	0	0	1	1	1	3	4	5	8	12
	750	—	0	0	0	0	1	1	1	2	3	5	7	11
	900	—	0	0	0	0	1	1	1	2	3	4	6	9
	1000	—	0	0	0	0	1	1	1	1	3	4	6	9
THHN, THWN, THWN-2	8	—	—	—	—	—	—	—	—	—	—	—	—	—
	6	—	2	4	7	13	17	29	41	64	86	111	175	250
	4	—	1	2	4	8	11	18	25	40	53	68	108	156
	2	—	1	1	3	5	8	13	18	28	38	49	77	112
	1	—	1	1	2	4	6	9	14	21	29	37	58	84
	1/0	—	1	1	1	3	5	8	12	18	24	31	49	72
	2/0	—	0	1	1	3	4	7	9	15	20	26	41	59
	3/0	—	0	1	1	2	3	5	8	12	17	22	34	50
	4/0	—	0	1	1	1	3	4	6	10	14	18	28	41
	250	—	0	0	1	1	1	3	5	8	11	14	22	32
	300	—	0	0	1	1	1	3	4	7	9	12	19	28
	350	—	0	0	1	1	1	3	4	6	8	10	17	24
	400	—	0	0	1	1	1	2	3	5	7	9	15	22
	500	—	0	0	0	1	1	1	3	4	6	8	13	18
	600	—	0	0	0	1	1	1	2	4	5	6	10	15
	700	—	0	0	0	1	1	1	1	3	4	5	9	13
	750	—	0	0	0	1	1	1	1	3	4	5	8	12
	900	—	0	0	0	0	1	1	1	2	3	4	7	10
	1000	—	0	0	0	0	1	1	1	2	3	4	6	9
XHHW, XHHW-2	8	—	3	5	8	14	20	33	47	73	99	127	200	290
	6	—	1	4	6	11	15	25	35	55	73	94	149	215
	4	—	1	2	4	8	11	18	25	40	53	68	108	156
	2	—	1	1	3	5	8	13	18	28	38	49	77	112
	1	—	1	1	2	4	6	9	14	21	29	37	58	84
	1/0	—	1	1	1	3	5	8	12	18	24	31	49	72
	2/0	—	1	1	1	3	4	7	10	15	20	26	42	60
	3/0	—	0	1	1	2	3	5	8	12	17	22	34	50
	4/0	—	0	1	1	1	3	5	7	10	14	18	29	42

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)											
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$ (27)	$\frac{1}{4}$ (35)	$\frac{1}{2}$ (41)	$\frac{2}{53}$ (53)	$\frac{2}{2}$ (63)	$\frac{3}{78}$ (78)	$\frac{3}{2}$ (91)	$\frac{4}{103}$ (103)	$\frac{5}{129}$ (129)
250	—	0	0	1	1	1	4	5	8	11	14	23	33
300	—	0	0	1	1	1	3	4	7	9	12	19	28
350	—	0	0	1	1	1	3	4	6	8	11	17	25
400	—	0	0	1	1	1	2	3	5	7	10	15	22
500	—	0	0	0	1	1	1	3	4	6	8	13	18
600	—	0	0	0	1	1	1	2	4	5	6	10	15
700	—	0	0	0	1	1	1	1	3	4	5	9	13
750	—	0	0	0	1	1	1	1	3	4	5	8	12
900	—	0	0	0	0	1	1	1	2	3	4	7	10
1000	—	0	0	0	0	1	1	1	2	3	4	6	9

Definition: *Compact stranding* is the result of a manufacturing process where the stranded conductor is compressed to the extent that the interstices (voids between strand wires) are virtually eliminated.

Table C.12 Maximum Number of Conductors or Fixture Wires in Type A, Rigid PVC Conduit (Based on Chapter 9: Table 1, Table 4, and Table 5)

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)											
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$ (27)	$\frac{1}{4}$ (35)	$\frac{1}{2}$ (41)	$\frac{2}{53}$ (53)	$\frac{2}{2}$ (63)	$\frac{3}{78}$ (78)	$\frac{3}{2}$ (91)	$\frac{4}{103}$ (103)	$\frac{5}{129}$ (129)

CONDUCTORS

RHH, RHW, RHW-2	14	—	5	9	14	24	31	49	74	112	146	187	—
	12	—	4	7	12	20	26	41	61	93	121	155	—
	10	—	3	6	10	16	21	33	50	75	98	125	—
	8	—	1	3	5	8	11	17	26	39	51	65	—
	6	—	1	2	4	6	9	14	21	31	41	52	—
	4	—	1	1	3	5	7	11	16	24	32	41	—
	3	—	1	1	3	4	6	9	14	21	28	36	—
	2	—	1	1	2	4	5	8	12	18	24	31	—
	1	—	0	1	1	2	3	5	8	12	16	20	—
	1/0	—	0	1	1	2	3	5	7	10	14	18	—
	2/0	—	0	1	1	1	2	4	6	9	12	15	—
	3/0	—	0	1	1	1	1	3	5	8	10	13	—
	4/0	—	0	0	1	1	1	3	4	7	9	11	—
	250	—	0	0	1	1	1	1	3	5	6	8	—
	300	—	0	0	1	1	1	1	3	4	6	7	—
	350	—	0	0	0	1	1	1	2	4	5	7	—
	400	—	0	0	0	1	1	1	2	3	5	6	—
	500	—	0	0	0	1	1	1	1	3	4	5	—
	600	—	0	0	0	0	1	1	1	2	3	4	—
	700	—	0	0	0	0	1	1	1	2	3	4	—
	750	—	0	0	0	0	1	1	1	1	3	4	—
	800	—	0	0	0	0	1	1	1	1	3	3	—
	900	—	0	0	0	0	0	1	1	1	2	3	—
	1000	—	0	0	0	0	0	1	1	1	2	3	—
	1250	—	0	0	0	0	0	1	1	1	1	2	—
	1500	—	0	0	0	0	0	0	1	1	1	1	—
	1750	—	0	0	0	0	0	0	1	1	1	1	—

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)											
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$
	2000	—	0	0	0	0	0	0	1	1	1	1	—
TW, THHW, THW, THW-2	14	—	11	18	31	51	67	105	157	235	307	395	—
	12	—	8	14	24	39	51	80	120	181	236	303	—
	10	—	6	10	18	29	38	60	89	135	176	226	—
	8	—	3	6	10	16	21	33	50	75	98	125	—
RHH*, RHW*, RHW-2*	14	—	7	12	20	34	44	69	104	157	204	262	—
	12	—	6	10	16	27	35	56	84	126	164	211	—
	10	—	4	8	13	21	28	44	65	98	128	165	—
	8	—	2	4	7	12	16	26	39	59	77	98	—
TW, THW, THHW, THW-2, RHH*, RHW*, RHW-2*	6	—	1	3	6	9	13	20	30	45	59	75	—
	4	—	1	2	4	7	9	15	22	33	44	56	—
	3	—	1	1	4	6	8	13	19	29	37	48	—
	2	—	1	1	3	5	7	11	16	24	32	41	—
	1	—	1	1	1	3	5	7	11	17	22	29	—
	1/0	—	1	1	1	3	4	6	10	14	19	24	—
	2/0	—	0	1	1	2	3	5	8	12	16	21	—
	3/0	—	0	1	1	1	3	4	7	10	13	17	—
	4/0	—	0	1	1	1	2	4	6	9	11	14	—
	250	—	0	0	1	1	1	3	4	7	9	12	—
	300	—	0	0	1	1	1	2	4	6	8	10	—
	350	—	0	0	1	1	1	2	3	5	7	9	—
THHN, THWN, THWN-2	400	—	0	0	1	1	1	1	3	5	6	8	—
	500	—	0	0	0	1	1	1	2	4	5	7	—
	600	—	0	0	0	1	1	1	1	3	4	5	—
	700	—	0	0	0	1	1	1	1	3	4	5	—
	750	—	0	0	0	1	1	1	1	3	3	4	—
	800	—	0	0	0	0	1	1	1	2	3	4	—
	900	—	0	0	0	0	1	1	1	2	3	4	—
	1000	—	0	0	0	0	1	1	1	1	3	3	—
	1250	—	0	0	0	0	0	1	1	1	1	3	—
	1500	—	0	0	0	0	0	1	1	1	1	2	—
	1750	—	0	0	0	0	0	0	1	1	1	1	—
	2000	—	0	0	0	0	0	0	1	1	1	1	—
THHN, THWN, THWN-2	14	—	16	27	44	73	96	150	225	338	441	566	—
	12	—	11	19	32	53	70	109	164	246	321	412	—
	10	—	7	12	20	33	44	69	103	155	202	260	—
	8	—	4	7	12	19	25	40	59	89	117	150	—
	6	—	3	5	8	14	18	28	43	64	84	108	—
	4	—	1	3	5	8	11	17	26	39	52	66	—
	3	—	1	2	4	7	9	15	22	33	44	56	—
	2	—	1	1	3	6	8	12	19	28	37	47	—
	1	—	1	1	2	4	6	9	14	21	27	35	—
	1/0	—	1	1	2	4	5	8	11	17	23	29	—
	2/0	—	1	1	1	3	4	6	10	14	19	24	—
	3/0	—	0	1	1	2	3	5	8	12	16	20	—

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$	(1
	4/0	—	0	1	1	1	3	4	6	10	13	17	—	—
	250	—	0	1	1	1	2	3	5	8	10	14	—	—
	300	—	0	0	1	1	1	3	4	7	9	12	—	—
	350	—	0	0	1	1	1	2	4	6	8	10	—	—
	400	—	0	0	1	1	1	2	3	5	7	9	—	—
	500	—	0	0	1	1	1	1	3	4	6	7	—	—
	600	—	0	0	0	1	1	1	2	3	5	6	—	—
	700	—	0	0	0	1	1	1	1	3	4	5	—	—
	750	—	0	0	0	1	1	1	1	3	4	5	—	—
	800	—	0	0	0	1	1	1	1	3	4	5	—	—
	900	—	0	0	0	0	1	1	1	2	3	4	—	—
	1000	—	0	0	0	0	1	1	1	2	3	4	—	—
FEP, FEPB, PFA, PFAH, TFE	14	—	15	26	43	70	93	146	218	327	427	549	—	—
	12	—	11	19	31	51	68	106	159	239	312	400	—	—
	10	—	8	13	22	37	48	76	114	171	224	287	—	—
	8	—	4	8	13	21	28	44	65	98	128	165	—	—
	6	—	3	5	9	15	20	31	46	70	91	117	—	—
	4	—	1	4	6	10	14	21	32	49	64	82	—	—
	3	—	1	3	5	8	11	18	27	40	53	68	—	—
	2	—	1	2	4	7	9	15	22	33	44	56	—	—
PFA, PFAH, TFE	1	—	1	1	3	5	6	10	15	23	30	39	—	—
PFA, PFAH, TFE, Z	1/0	—	1	1	2	4	5	8	13	19	25	32	—	—
	2/0	—	1	1	1	3	4	7	10	16	21	27	—	—
	3/0	—	1	1	1	3	3	6	9	13	17	22	—	—
	4/0	—	0	1	1	2	3	5	7	11	14	18	—	—
Z	14	—	18	31	52	85	112	175	262	395	515	661	—	—
	12	—	13	22	37	60	79	124	186	280	365	469	—	—
	10	—	8	13	22	37	48	76	114	171	224	287	—	—
	8	—	5	8	14	23	30	48	72	108	141	181	—	—
	6	—	3	6	10	16	21	34	50	76	99	127	—	—
	4	—	2	4	7	11	15	23	35	52	68	88	—	—
	3	—	1	3	5	8	11	17	25	38	50	64	—	—
	2	—	1	2	4	7	9	14	21	32	41	53	—	—
	1	—	1	1	3	5	7	11	17	26	33	43	—	—
	14	—	11	18	31	51	67	105	157	235	307	395	—	—
	12	—	8	14	24	39	51	80	120	181	236	303	—	—
	10	—	6	10	18	29	38	60	89	135	176	226	—	—
XHHW, ZW, XHHW-2, XHH	8	—	3	6	10	16	21	33	50	75	98	125	—	—
	6	—	2	4	7	12	15	24	37	55	72	93	—	—
	4	—	1	3	5	8	11	18	26	40	52	67	—	—
	3	—	1	2	4	7	9	15	22	34	44	57	—	—
XHHW, XHHW-2,	2	—	1	1	3	6	8	12	19	28	37	48	—	—
	1	—	1	1	3	4	6	9	14	21	28	35	—	—
	1/0	—	1	1	2	4	5	8	12	18	23	30	—	—

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)											
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$
XHH	2/0	—	1	1	1	3	4	6	10	15	19	25	—
	3/0	—	0	1	1	2	3	5	8	12	16	20	—
	4/0	—	0	1	1	1	3	4	7	10	13	17	—
	250	—	0	1	1	1	2	3	5	8	11	14	—
	300	—	0	0	1	1	1	3	5	7	9	12	—
	350	—	0	0	1	1	1	3	4	6	8	10	—
	400	—	0	0	1	1	1	2	3	5	7	9	—
	500	—	0	0	1	1	1	1	3	4	6	8	—
	600	—	0	0	0	1	1	1	2	3	5	6	—
	700	—	0	0	0	1	1	1	1	3	4	5	—
	750	—	0	0	0	1	1	1	1	3	4	5	—
	800	—	0	0	0	1	1	1	1	3	4	5	—
	900	—	0	0	0	0	1	1	1	2	3	4	—
	1000	—	0	0	0	0	1	1	1	2	3	4	—
	1250	—	0	0	0	0	0	1	1	1	2	3	—
	1500	—	0	0	0	0	0	1	1	1	1	2	—
	1750	—	0	0	0	0	0	1	1	1	1	2	—
	2000	—	0	0	0	0	0	0	1	1	1	1	—
FIXTURE WIRES													
RFH-2, FFH-2, RFHH-2	18	—	10	18	30	48	64	100	150	226	295	378	—
	16	—	9	15	25	41	54	85	127	190	248	319	—
SF-2, SFF-2	18	—	13	22	37	61	81	127	189	285	372	477	—
	16	—	11	18	31	51	67	105	157	235	307	395	—
	14	—	9	15	25	41	54	85	127	190	248	319	—
SF-1, SFF-1	18	—	23	40	66	108	143	224	335	504	658	844	—
RFH-1, TF, TFF, XF, XFF	18	—	17	29	49	80	105	165	248	372	486	623	—
	16	—	14	24	39	65	85	134	200	300	392	503	—
XF, XFF	14	—	11	18	31	51	67	105	157	235	307	395	—
TFN, TFFN	18	—	28	47	79	128	169	265	396	596	777	998	—
	16	—	21	36	60	98	129	202	303	455	594	762	—
PF, PFF, PGF, PGFF, PAF, PTF, PTFF, PAFF	18	—	26	45	74	122	160	251	376	565	737	946	—
	16	—	20	34	58	94	124	194	291	437	570	732	—
	14	—	15	26	43	70	93	146	218	327	427	549	—
ZF, ZFF, ZHF	18	—	34	57	96	157	206	324	484	728	950	1220	—
	16	—	25	42	71	116	152	239	357	537	701	900	—
	14	—	18	31	52	85	112	175	262	395	515	661	—
KF-2, KFF-2	18	—	51	86	144	235	310	486	727	1092	1426	1829	—
	16	—	36	60	101	164	216	339	507	762	994	1276	—
	14	—	24	40	67	110	145	228	341	512	668	857	—
	12	—	16	28	47	77	101	158	237	356	465	596	—
	10	—	11	18	31	51	67	105	157	235	307	395	—

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)											
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$
KF-1, KFF-1	18	—	59	100	166	272	357	561	839	1260	1645	2111	—
	16	—	41	70	117	191	251	394	589	886	1156	1483	—
	14	—	28	47	79	128	169	265	396	596	777	998	—
	12	—	18	31	52	85	112	175	262	395	515	661	—
	10	—	12	20	34	55	73	115	171	258	337	432	—
XF, XFF	12	—	6	10	16	27	35	56	84	126	164	211	—
	10	—	4	8	13	21	28	44	65	98	128	165	—

Notes:

1. This table is for concentric stranded conductors only. For compact stranded conductors, Table C.11(A) should be used.

2. Two-hour fire-rated RHH cable has ceramifiable insulation, which has much larger diameters than other RHH wires. Consult manufacturer's conduit fill tables.

*Types RHH, RHW, and RHW-2 without outer covering.

Table C.12(A) Maximum Number of Conductors or Fixture Wires in Type A, Rigid PVC Conduit (Based on Chapter 9: Table 1, Table 4, and Table 5A)

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$	$\frac{6}{141}$
COMPACT CONDUCTORS														
THW, THW-2, THHW	8	—	3	5	8	14	18	28	42	64	84	107	—	—
	6	—	2	4	6	10	14	22	33	49	65	83	—	—
	4	—	1	3	5	8	10	16	24	37	48	62	—	—
	2	—	1	1	3	6	7	12	18	27	36	46	—	—
	1	—	1	1	2	4	5	8	13	19	25	32	—	—
	1/0	—	1	1	1	3	4	7	11	16	21	28	—	—
	2/0	—	1	1	1	3	4	6	9	14	18	23	—	—
	3/0	—	0	1	1	2	3	5	8	12	15	20	—	—
	4/0	—	0	1	1	1	3	4	6	10	13	17	—	—
	250	—	0	1	1	1	1	3	5	8	10	13	—	—
	300	—	0	0	1	1	1	3	4	7	9	11	—	—
	350	—	0	0	1	1	1	2	4	6	8	10	—	—
	400	—	0	0	1	1	1	2	3	5	7	9	—	—
	500	—	0	0	1	1	1	1	3	4	6	8	—	—
	600	—	0	0	0	1	1	1	2	3	5	6	—	—
700	—	0	0	0	1	1	1	1	3	4	5	—	—	
750	—	0	0	0	1	1	1	1	3	4	5	—	—	
900	—	0	0	0	0	1	1	1	2	3	4	—	—	
1000	—	0	0	0	0	1	1	1	2	3	4	—	—	
THHN, THWN, THWN-2	8	—	—	—	—	—	—	—	—	—	—	—	—	—
	6	—	3	5	9	15	20	32	48	72	94	121	—	—
	4	—	1	3	6	9	12	20	30	45	58	75	—	—
	2	—	1	2	4	7	9	14	21	32	42	54	—	—
	1	—	1	1	3	5	7	10	16	24	31	40	—	—
	1/0	—	1	1	2	4	6	9	13	20	27	34	—	—
	2/0	—	1	1	1	3	5	7	11	17	22	28	—	—

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$ (27)	$\frac{1}{4}$ (35)	$\frac{1}{2}$ (41)	$\frac{2}{53}$ (53)	$\frac{2}{2}$ (63)	$\frac{3}{78}$ (78)	$\frac{3}{2}$ (91)	$\frac{4}{103}$ (103)	$\frac{5}{129}$ (129)	$\frac{6}{147}$ (147)
	3/0	—	1	1	1	3	4	6	9	14	18	24	—	—
	4/0	—	0	1	1	2	3	5	8	11	15	19	—	—
	250	—	0	1	1	1	2	4	6	9	12	15	—	—
	300	—	0	1	1	1	1	3	5	8	10	13	—	—
	350	—	0	0	1	1	1	3	4	7	9	11	—	—
	400	—	0	0	1	1	1	2	4	6	8	10	—	—
	500	—	0	0	1	1	1	2	3	5	7	9	—	—
	600	—	0	0	0	1	1	1	3	4	5	7	—	—
	700	—	0	0	0	1	1	1	2	3	5	6	—	—
	750	—	0	0	0	1	1	1	2	3	4	6	—	—
XHHW, XHHW-2	900	—	0	0	0	1	1	1	1	3	4	5	—	—
	1000	—	0	0	0	0	1	1	1	2	3	4	—	—
	8	—	4	6	11	18	23	37	55	83	108	139	—	—
	6	—	3	5	8	13	17	27	41	62	80	103	—	—
	4	—	1	3	6	9	12	20	30	45	58	75	—	—
	2	—	1	2	4	7	9	14	21	32	42	54	—	—
	1	—	1	1	3	5	7	10	16	24	31	40	—	—
	1/0	—	1	1	2	4	6	9	13	20	27	34	—	—
	2/0	—	1	1	1	3	5	7	11	17	22	29	—	—
	3/0	—	1	1	1	3	4	6	9	14	18	24	—	—
	4/0	—	0	1	1	2	3	5	8	12	15	20	—	—
	250	—	0	1	1	1	2	4	6	9	12	16	—	—
	300	—	0	1	1	1	1	3	5	8	10	13	—	—
	350	—	0	0	1	1	1	3	5	7	9	12	—	—
	400	—	0	0	1	1	1	3	4	6	8	11	—	—
	500	—	0	0	1	1	1	2	3	5	7	9	—	—
	600	—	0	0	0	1	1	1	3	4	5	7	—	—
	700	—	0	0	0	1	1	1	2	3	5	6	—	—
	750	—	0	0	0	1	1	1	2	3	4	6	—	—
	900	—	0	0	0	1	1	1	1	3	4	5	—	—
	1000	—	0	0	0	0	1	1	1	2	3	4	—	—

Definition: *Compact stranding* is the result of a manufacturing process where the stranded conductor is compressed to the extent that the interstices (voids between strand wires) are virtually eliminated.

Table C.13 Maximum Number of Conductors or Fixture Wires in Type EB, PVC Conduit (Based on Chapter 9: Table 1, Table 4, and Table 5)

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		³ / ₈ (12)	¹ / ₂ (16)	³ / ₄ (21)	<u>1</u> (27)	¹ / ₄ (35)	¹ / ₂ (41)	<u>2</u> (53)	² / ₁ (63)	<u>3</u> (78)	³ / ₂ (91)	<u>4</u> (103)	<u>5</u> (129)	<u>6</u> (147)
CONDUCTORS														
RHH, RHW, RHW-2	14	—	—	—	—	—	—	53	—	119	155	197	303	437
	12	—	—	—	—	—	—	44	—	98	128	163	251	357
	10	—	—	—	—	—	—	35	—	79	104	132	203	287
	8	—	—	—	—	—	—	18	—	41	54	69	106	157
	6	—	—	—	—	—	—	15	—	33	43	55	85	127
	4	—	—	—	—	—	—	11	—	26	34	43	66	94

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$	(1
	3	—	—	—	—	—	—	10	—	23	30	38	58	83
	2	—	—	—	—	—	—	9	—	20	26	33	50	72
	1	—	—	—	—	—	—	6	—	13	17	21	33	47
	1/0	—	—	—	—	—	—	5	—	11	15	19	29	41
	2/0	—	—	—	—	—	—	4	—	10	13	16	25	36
	3/0	—	—	—	—	—	—	4	—	8	11	14	22	31
	4/0	—	—	—	—	—	—	3	—	7	9	12	18	26
	250	—	—	—	—	—	—	2	—	5	7	9	14	20
	300	—	—	—	—	—	—	1	—	5	6	8	12	17
	350	—	—	—	—	—	—	1	—	4	5	7	11	16
	400	—	—	—	—	—	—	1	—	4	5	6	10	14
	500	—	—	—	—	—	—	1	—	3	4	5	9	12
	600	—	—	—	—	—	—	1	—	3	3	4	7	10
	700	—	—	—	—	—	—	1	—	2	3	4	6	9
	750	—	—	—	—	—	—	1	—	2	3	4	6	9
	800	—	—	—	—	—	—	1	—	2	3	4	6	8
	900	—	—	—	—	—	—	1	—	1	2	3	5	7
	1000	—	—	—	—	—	—	1	—	1	2	3	5	7
	1250	—	—	—	—	—	—	1	—	1	1	2	3	5
	1500	—	—	—	—	—	—	0	—	1	1	1	3	4
	1750	—	—	—	—	—	—	0	—	1	1	1	3	4
	2000	—	—	—	—	—	—	0	—	1	1	1	2	3
TW, THHW, THW, THW-2	14	—	—	—	—	—	—	111	—	250	327	415	638	90
	12	—	—	—	—	—	—	85	—	192	251	319	490	69
	10	—	—	—	—	—	—	63	—	143	187	238	365	51
	8	—	—	—	—	—	—	35	—	79	104	132	203	28
RHH*, RHW*, RHW-2*	14	—	—	—	—	—	—	74	—	166	217	276	424	60
	12	—	—	—	—	—	—	59	—	134	175	222	341	48
	10	—	—	—	—	—	—	46	—	104	136	173	266	37
	8	—	—	—	—	—	—	28	—	62	81	104	159	22
TW, THW, THHW, THW-2, RHH*, RHW*, RHW-2*	6	—	—	—	—	—	—	21	—	48	62	79	122	17
	4	—	—	—	—	—	—	16	—	36	46	59	91	12
	3	—	—	—	—	—	—	13	—	30	40	51	78	11
	2	—	—	—	—	—	—	11	—	26	34	43	66	94
	1	—	—	—	—	—	—	8	—	18	24	30	46	66
	1/0	—	—	—	—	—	—	7	—	15	20	26	40	56
	2/0	—	—	—	—	—	—	6	—	13	17	22	34	48
	3/0	—	—	—	—	—	—	5	—	11	14	18	28	40
	4/0	—	—	—	—	—	—	4	—	9	12	15	24	34
	250	—	—	—	—	—	—	3	—	7	10	12	19	27
	300	—	—	—	—	—	—	3	—	6	8	11	17	24
	350	—	—	—	—	—	—	2	—	6	7	9	15	21
	400	—	—	—	—	—	—	2	—	5	7	8	13	19
	500	—	—	—	—	—	—	1	—	4	5	7	11	16
	600	—	—	—	—	—	—	1	—	3	4	6	9	13

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$	(1
	700	—	—	—	—	—	—	1	—	3	4	5	8	11
	750	—	—	—	—	—	—	1	—	3	4	5	7	11
	800	—	—	—	—	—	—	1	—	3	3	4	7	10
	900	—	—	—	—	—	—	1	—	2	3	4	6	9
	1000	—	—	—	—	—	—	1	—	2	3	4	6	8
	1250	—	—	—	—	—	—	1	—	1	2	3	4	6
	1500	—	—	—	—	—	—	1	—	1	1	2	4	6
	1750	—	—	—	—	—	—	1	—	1	1	2	3	5
	2000	—	—	—	—	—	—	0	—	1	1	1	3	4
THHN, THWN, THWN-2	14	—	—	—	—	—	—	159	—	359	468	595	915	13
	12	—	—	—	—	—	—	116	—	262	342	434	667	94
	10	—	—	—	—	—	—	73	—	165	215	274	420	59
	8	—	—	—	—	—	—	42	—	95	124	158	242	34
	6	—	—	—	—	—	—	30	—	68	89	114	175	24
	4	—	—	—	—	—	—	19	—	42	55	70	107	15
	3	—	—	—	—	—	—	16	—	36	46	59	91	12
	2	—	—	—	—	—	—	13	—	30	39	50	76	10
	1	—	—	—	—	—	—	10	—	22	29	37	57	80
	1/0	—	—	—	—	—	—	8	—	18	24	31	48	68
	2/0	—	—	—	—	—	—	7	—	15	20	26	40	56
	3/0	—	—	—	—	—	—	5	—	13	17	21	33	47
	4/0	—	—	—	—	—	—	4	—	10	14	18	27	39
	250	—	—	—	—	—	—	4	—	8	11	14	22	31
	300	—	—	—	—	—	—	3	—	7	10	12	19	27
	350	—	—	—	—	—	—	3	—	6	8	11	17	24
	400	—	—	—	—	—	—	2	—	6	7	10	15	21
	500	—	—	—	—	—	—	1	—	5	6	8	12	18
	600	—	—	—	—	—	—	1	—	4	5	6	10	14
	700	—	—	—	—	—	—	1	—	3	4	6	9	12
	750	—	—	—	—	—	—	1	—	3	4	5	8	12
	800	—	—	—	—	—	—	1	—	3	4	5	8	11
	900	—	—	—	—	—	—	1	—	3	3	4	7	10
	1000	—	—	—	—	—	—	1	—	2	3	4	6	9
FEP, FEPB, PFA, PFAH, TFE	14	—	—	—	—	—	—	155	—	348	454	578	887	12
	12	—	—	—	—	—	—	113	—	254	332	422	648	92
	10	—	—	—	—	—	—	81	—	182	238	302	465	66
	8	—	—	—	—	—	—	46	—	104	136	173	266	37
	6	—	—	—	—	—	—	33	—	74	97	123	189	26
	4	—	—	—	—	—	—	23	—	52	68	86	132	18
	3	—	—	—	—	—	—	19	—	43	56	72	110	15
	2	—	—	—	—	—	—	16	—	36	46	59	91	12
PFA, PFAH, TFE	1	—	—	—	—	—	—	11	—	25	32	41	63	90
PFA, PFAH,	1/0	—	—	—	—	—	—	9	—	20	27	34	53	75
	2/0	—	—	—	—	—	—	7	—	17	22	28	43	62

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$	(1
TFE, Z	3/0	—	—	—	—	—	—	6	—	14	18	23	36	51
	4/0	—	—	—	—	—	—	5	—	11	15	19	29	42
Z	14	—	—	—	—	—	—	186	—	419	547	696	1069	15
	12	—	—	—	—	—	—	132	—	297	388	494	759	10
	10	—	—	—	—	—	—	81	—	182	238	302	465	66
	8	—	—	—	—	—	—	51	—	115	150	191	294	41
	6	—	—	—	—	—	—	36	—	81	105	134	206	29
	4	—	—	—	—	—	—	24	—	55	72	92	142	20
	3	—	—	—	—	—	—	18	—	40	53	67	104	14
	2	—	—	—	—	—	—	15	—	34	44	56	86	12
	1	—	—	—	—	—	—	12	—	27	36	45	70	99
XHHW, ZW, XHHW-2, XHH	14	—	—	—	—	—	—	111	—	250	327	415	638	90
	12	—	—	—	—	—	—	85	—	192	251	319	490	69
	10	—	—	—	—	—	—	63	—	143	187	238	365	51
	8	—	—	—	—	—	—	35	—	79	104	132	203	28
	6	—	—	—	—	—	—	26	—	59	77	98	150	21
	4	—	—	—	—	—	—	19	—	42	56	71	109	15
	3	—	—	—	—	—	—	16	—	36	47	60	92	13
	2	—	—	—	—	—	—	13	—	30	39	50	77	11
XHHW, XHHW-2, XHH	1	—	—	—	—	—	—	10	—	22	29	37	58	82
	1/0	—	—	—	—	—	—	8	—	19	25	31	48	69
	2/0	—	—	—	—	—	—	7	—	16	20	26	40	57
	3/0	—	—	—	—	—	—	6	—	13	17	22	33	47
	4/0	—	—	—	—	—	—	5	—	11	14	18	27	39
	250	—	—	—	—	—	—	4	—	9	11	15	22	32
	300	—	—	—	—	—	—	3	—	7	10	12	19	28
	350	—	—	—	—	—	—	3	—	6	8	11	17	24
	400	—	—	—	—	—	—	2	—	6	8	10	15	22
	500	—	—	—	—	—	—	1	—	5	6	8	12	18
	600	—	—	—	—	—	—	1	—	4	5	6	10	14
	700	—	—	—	—	—	—	1	—	3	4	6	9	12
	750	—	—	—	—	—	—	1	—	3	4	5	8	12
	800	—	—	—	—	—	—	1	—	3	4	5	8	11
	900	—	—	—	—	—	—	1	—	3	3	4	7	10
	1000	—	—	—	—	—	—	1	—	2	3	4	6	9
	1250	—	—	—	—	—	—	1	—	1	2	3	5	7
	1500	—	—	—	—	—	—	1	—	1	1	3	4	6
	1750	—	—	—	—	—	—	1	—	1	1	2	4	5
	2000	—	—	—	—	—	—	0	—	1	1	1	3	5
FIXTURE WIRES														
RFH-2, FFH-2, RFHH-2	18	—	—	—	—	—	—	107	—	240	313	398	612	86
	16	—	—	—	—	—	—	90	—	202	264	336	516	73
SF-2, SFF-2	18	—	—	—	—	—	—	134	—	303	395	502	772	10
	16	—	—	—	—	—	—	111	—	250	327	415	638	90
	14	—	—	—	—	—	—	90	—	202	264	336	516	73

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$	(1
SF-1, SFF-1	18	—	—	—	—	—	—	238	—	536	699	889	1366	19
RFH-1, TF, TFF, XF, XFF	18	—	—	—	—	—	—	176	—	396	516	656	1009	14
	16	—	—	—	—	—	—	142	—	319	417	530	814	11
XF, XFF	14	—	—	—	—	—	—	111	—	250	327	415	638	90
TFN, TFFN	18	—	—	—	—	—	—	281	—	633	826	1050	1614	22
	16	—	—	—	—	—	—	215	—	484	631	802	1233	17
PF, PFF, PGF, PGFF, PAF, PTF, PTFF, PAFF	18	—	—	—	—	—	—	267	—	600	783	996	1530	21
	16	—	—	—	—	—	—	206	—	464	606	770	1183	16
	14	—	—	—	—	—	—	155	—	348	454	578	887	12
ZF, ZFF, ZHF	18	—	—	—	—	—	—	344	—	774	1010	1284	1973	28
	16	—	—	—	—	—	—	254	—	571	745	947	1455	20
	14	—	—	—	—	—	—	186	—	419	547	696	1069	15
KF-2, KFF-2	18	—	—	—	—	—	—	516	—	1161	1515	1926	2959	42
	16	—	—	—	—	—	—	360	—	810	1057	1344	2064	29
	14	—	—	—	—	—	—	242	—	544	710	903	1387	19
	12	—	—	—	—	—	—	168	—	378	494	628	965	13
	10	—	—	—	—	—	—	111	—	250	327	415	638	90
KF-1, KFF-1	18	—	—	—	—	—	—	596	—	1340	1748	2222	3414	48
	16	—	—	—	—	—	—	419	—	941	1228	1562	2399	34
	14	—	—	—	—	—	—	281	—	633	826	1050	1614	22
	12	—	—	—	—	—	—	186	—	419	547	696	1069	15
	10	—	—	—	—	—	—	122	—	274	358	455	699	99
XF, XFF	12	—	—	—	—	—	—	59	—	134	175	222	341	48
	10	—	—	—	—	—	—	46	—	104	136	173	266	37

Notes:

1. This table is for concentric stranded conductors only. For compact stranded conductors, Table C.12(A) should be used.
2. Two-hour fire-rated RHH cable has ceramifiable insulation, which has much larger diameters than other RHH wires. Consult manufacturer's conduit fill tables.

*Types RHH, RHW, and RHW-2 without outer covering.

Table C.13(A) Maximum Number of Conductors or Fixture Wires in Type EB, PVC Conduit (Based on Chapter 9: Table 1, Table 4, and Table 5A)

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$	$1\frac{1}{4}$ (35)	$1\frac{1}{2}$ (41)	$\frac{2}{53}$	$2\frac{1}{2}$ (63)	$\frac{3}{78}$	$3\frac{1}{2}$ (91)	$\frac{4}{103}$	$\frac{5}{129}$	$\frac{6}{141}$
COMPACT CONDUCTORS														
THW, THW-2, THHW	8	—	—	—	—	—	—	30	—	68	89	113	174	247
	6	—	—	—	—	—	—	23	—	52	69	87	134	197
	4	—	—	—	—	—	—	17	—	39	51	65	100	143
	2	—	—	—	—	—	—	13	—	29	38	48	74	105
	1	—	—	—	—	—	—	9	—	20	26	34	52	74

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$ (27)	$\frac{1}{4}$ (35)	$\frac{1}{2}$ (41)	$\frac{2}{53}$ (53)	$\frac{2}{2}$ (63)	$\frac{3}{78}$ (78)	$\frac{3}{2}$ (91)	$\frac{4}{103}$ (103)	$\frac{5}{129}$ (129)	$\frac{6}{150}$ (150)
	1/0	—	—	—	—	—	—	8	—	17	23	29	45	64
	2/0	—	—	—	—	—	—	6	—	15	19	24	38	54
	3/0	—	—	—	—	—	—	5	—	12	16	21	32	46
	4/0	—	—	—	—	—	—	4	—	10	14	17	27	38
	250	—	—	—	—	—	—	3	—	8	11	14	21	30
	300	—	—	—	—	—	—	3	—	7	9	12	19	26
	350	—	—	—	—	—	—	3	—	6	8	11	17	24
	400	—	—	—	—	—	—	2	—	6	7	10	15	21
	500	—	—	—	—	—	—	1	—	5	6	8	12	18
	600	—	—	—	—	—	—	1	—	4	5	6	10	14
	700	—	—	—	—	—	—	1	—	3	4	6	9	13
	750	—	—	—	—	—	—	1	—	3	4	5	8	12
	900	—	—	—	—	—	—	1	—	3	4	5	7	10
	1000	—	—	—	—	—	—	1	—	2	3	4	7	9
THHN, THWN, THWN-2	8	—	—	—	—	—	—	—	—	—	—	—	—	—
	6	—	—	—	—	—	—	34	—	77	100	128	196	279
	4	—	—	—	—	—	—	21	—	47	62	79	121	172
	2	—	—	—	—	—	—	15	—	34	44	57	87	124
	1	—	—	—	—	—	—	11	—	25	33	42	65	93
	1/0	—	—	—	—	—	—	9	—	22	28	36	56	79
	2/0	—	—	—	—	—	—	8	—	18	23	30	46	65
	3/0	—	—	—	—	—	—	6	—	15	20	25	38	55
	4/0	—	—	—	—	—	—	5	—	12	16	20	32	45
	250	—	—	—	—	—	—	4	—	10	13	16	25	35
	300	—	—	—	—	—	—	4	—	8	11	14	22	31
	350	—	—	—	—	—	—	3	—	7	9	12	19	27
	400	—	—	—	—	—	—	3	—	6	8	11	17	24
	500	—	—	—	—	—	—	2	—	5	7	9	14	20
	600	—	—	—	—	—	—	1	—	4	6	7	11	16
	700	—	—	—	—	—	—	1	—	4	5	6	10	14
	750	—	—	—	—	—	—	1	—	4	5	6	9	14
	900	—	—	—	—	—	—	1	—	3	4	5	8	11
	1000	—	—	—	—	—	—	1	—	3	3	4	7	10
XHHW, XHHW-2	8	—	—	—	—	—	—	39	—	88	115	146	225	320
	6	—	—	—	—	—	—	29	—	65	85	109	167	238
	4	—	—	—	—	—	—	21	—	47	62	79	121	172
	2	—	—	—	—	—	—	15	—	34	44	57	87	124
	1	—	—	—	—	—	—	11	—	25	33	42	65	93
	1/0	—	—	—	—	—	—	9	—	22	28	36	56	79
	2/0	—	—	—	—	—	—	8	—	18	24	30	47	67
	3/0	—	—	—	—	—	—	6	—	15	20	25	38	55
	4/0	—	—	—	—	—	—	5	—	12	16	21	32	46
	250	—	—	—	—	—	—	4	—	10	13	17	26	37
	300	—	—	—	—	—	—	4	—	8	11	14	22	31
	350	—	—	—	—	—	—	3	—	7	10	12	19	28
	400	—	—	—	—	—	—	3	—	7	9	11	17	25

Type	Conductor Size (AWG/ kcmil)	Trade Size (Metric Designator)												
		$\frac{3}{8}$ (12)	$\frac{1}{2}$ (16)	$\frac{3}{4}$ (21)	$\frac{1}{27}$ (27)	$\frac{1}{4}$ (35)	$\frac{1}{2}$ (41)	$\frac{2}{53}$ (53)	$\frac{2}{2}$ (63)	$\frac{3}{78}$ (78)	$\frac{3}{2}$ (91)	$\frac{4}{103}$ (103)	$\frac{5}{129}$ (129)	$\frac{6}{150}$ (150)
500		—	—	—	—	—	—	2	—	5	7	9	14	20
600		—	—	—	—	—	—	1	—	4	6	7	11	16
700		—	—	—	—	—	—	1	—	4	5	6	10	14
750		—	—	—	—	—	—	1	—	3	5	6	9	13
900		—	—	—	—	—	—	1	—	3	4	5	8	11
1000		—	—	—	—	—	—	1	—	3	4	5	7	10

Definition: *Compact stranding* is the result of a manufacturing process where the stranded conductor is compressed to the extent that the interstices (voids between strand wires) are virtually eliminated.

Table C.14 Number of Type MC Cables Allowed Permitted in Cable Tray (3C Multiconductor MC Cable Non-Jacketed Assembly)(Based on Fill per fill in accordance with 392.9, Table 392.9, Column column 1, Ampacity ampacity per in accordance with 392.11)

Ventilated Tray Width [mm (in.)]													
Conductor Insulation Type	Conductor Size (AWG/kcmil)	50 (2)	100 (4)	150 (6)	200 (8)	300 (12)	400 (16)	450 (18)	500 (20)	600 (24)	750 (30)	900 (36)	Dia Used Cable Diameter
THHN													
	14	13	27	41	55	82	110	124	138	165	206	248	0.46
	12	10	20	31	41	62	83	93	104	124	160	192	0.53
	10	7	15	23	31	47	62	70	78	94	119	149	0.61
	8	6	12	18	25	37	50	56	63	75	96	116	0.68
	6	4	8	13	17	26	34	39	43	52	66	79	0.82
	4	2	5	8	11	17	23	26	29	35	45	55	0.99
	3	2	5	7	10	15	21	23	26	31	40	48	1.05
	2	2	4	6	9	13	18	20	22	27	34	41	1.13
	1	2	4	6	8	12	16	18	20	24	30	36	1.2
	1/0	1	3	5	7	11	14	16	18	22	28	34	1.25
	2/0	1	3	4	6	9	13	14	16	19	24	29	1.34
	3/0	1	2	3	5	7	10	11	13	15	20	24	1.49
	4/0	1	2	3	5	7	10	11	12	15	19	22	1.57
	250	1	2	3	4	6	9	10	11	13	17	20	1.74
	300	1	2	3	4	6	8	9	10	12	16	19	1.86
	350	1	2	3	4	6	8	9	10	12	15	18	1.96
	400	0	1	2	3	5	7	8	9	11	14	17	2.11
	500	0	1	2	3	5	7	7	8	10	13	16	2.24
	600	0	1	2	3	4	6	7	8	9	12	15	2.38
	700	0	1	2	3	4	6	7	7	9	11	14	2.52
	750	0	1	2	2	4	5	6	7	8	11	13	2.67
	800	0	1	2	2	4	5	6	6	8	10	12	2.85
	900	0	1	1	2	3	5	5	6	7	10	12	2.99
	1000	0	1	1	2	3	4	5	6	7	9	11	3.25

Notes: 1. Both aluminum and copper worst-case diameter used. Note: Single conductor diameters were obtained from Chapter 9, Table 5.

2. Ampacity per 310.16 and 310.18.

Table C.15 Number of Type MC Cables Allowed per Code (4C Multiconductor MC Cable Non-Jacketed Assembly)(Based on Fill per 392.22, Table 392.22(A), Column 1, Ampacity per 392.80)

Ventilated Tray Width [mm (in.)]

<u>Conductor Insulation Type</u>	<u>Conductor Size (AWG/kcmil)</u>	<u>50 (2)</u>	<u>100 (4)</u>	<u>150 (6)</u>	<u>200 (8)</u>	<u>225 (9)</u>	<u>300 (12)</u>	<u>400 (16)</u>	<u>450 (18)</u>	<u>500 (20)</u>	<u>600 (24)</u>	<u>750 (30)</u>	<u>900 (36)</u>
THHN													
	14	13	27	40	54	64	81	108	122	135	162	202	243
	12	10	21	31	42	47	63	84	94	105	126	157	189
	10	7	15	23	31	35	47	62	70	78	94	117	141
	8	6	12	19	25	28	38	50	57	63	76	101	114
	6	4	8	13	17	19	26	34	39	43	52	65	78
	4	3	6	9	12	14	18	24	27	30	36	45	54
	3	2	5	7	10	11	15	21	23	26	31	38	46
	2	2	4	6	9	10	13	18	20	22	27	33	40
	1	2	4	6	8	9	12	16	18	20	24	30	36
	1/0	1	3	5	7	8	11	15	16	18	22	27	33
	2/0	1	3	4	6	7	9	12	14	16	19	23	28
	3/0	1	2	4	5	6	7	10	11	13	15	19	22
	4/0	1	2	3	5	6	7	10	11	12	15	18	22
	250	1	2	3	4	5	6	9	10	11	13	16	19
	300	1	2	3	4	5	6	8	9	10	12	15	18
	350	1	2	3	4	5	6	8	9	10	12	15	18
	400	0	1	2	3	3	5	7	8	9	11	13	14
	500	0	1	2	3	3	5	7	7	8	10	12	15
	600	0	1	2	3	3	5	5	7	8	10	12	15
	700	0	1	2	3	3	5	6	7	7	8	10	14
	750	0	1	2	2	2	4	5	6	6	8	11	13
	800	0	1	2	2	2	4	5	6	7	8	10	12
	900	0	1	2	2	2	4	5	6	6	8	10	12
	1000	0	1	1	1	1	3	4	5	5	7	9	11

Note: Both aluminum and copper largest commercial cable diameter used.

Table C.15 Number of Type MC Cables Permitted in Cable Tray (4C Multiconductor MC Cable Non-Jacketed Assembly) (Based on fill in accordance with 392.22, Table 392.22(A), column 1, ampacity in accordance with 392.80)

Conductor Insulation Type	Conductor Size (AWG/kcmil)	Ventilated Tray Width [mm (in.)]												Cable Diameter	
		50 (2)	100 (4)	150 (6)	200 (8)	225 (9)	300 (12)	400 (16)	450 (18)	500 (20)	600 (24)	750 (30)	900 (36)		
THHN															
	14	10	23	37	47	55	73	94	110	120	146	183	219	0.494	
	12	8	18	28	37	43	57	73	85	93	114	142	171	0.56	
	10	6	14	21	27	32	42	54	63	69	84	105	127	0.65	
	8	5	11	17	22	25	33	43	50	55	67	84	100	0.73	
	6	3	7	12	15	17	23	30	35	38	46	58	69	0.88	
	4	2	5	8	10	11	15	19	23	25	30	38	45	1.09	
	3	2	4	7	9	10	13	17	20	22	27	33	40	1.155	
	2	2	3	5	7	8	11	14	16	18	21	27	32	1.29	
	1	1	3	5	6	7	10	12	15	16	19	24	29	1.355	
		1/0	1	3	5	6	7	9	12	14	15	19	24	28	1.375
		2/0	1	2	3	4	5	7	9	10	11	14	17	21	1.608
		3/0	1	2	3	4	4	6	7	9	10	12	15	17	1.75
		4/0	1	2	3	4	4	6	8	9	10	12	15	18	1.97

<u>Conductor Insulation Type</u>	<u>Conductor Size (AWG/kcmil)</u>	<u>Ventilated Tray Width [mm (in.)]</u>												<u>Cable Diameter</u>
		<u>50 (2)</u>	<u>100 (4)</u>	<u>150 (6)</u>	<u>200 (8)</u>	<u>225 (9)</u>	<u>300 (12)</u>	<u>400 (16)</u>	<u>450 (18)</u>	<u>500 (20)</u>	<u>600 (24)</u>	<u>750 (30)</u>	<u>900 (36)</u>	
	250	0	1	2	3	4	5	7	8	9	11	14	17	2.01
	300	0	1	2	3	3	5	7	7	8	10	13	15	2.255
	350	0	1	2	3	3	5	6	7	8	10	12	15	2.39
	400	0	1	2	3	3	4	6	7	8	9	12	14	2.46
	500	0	1	2	2	3	4	5	6	7	8	11	13	2.71
	600	0	1	2	2	3	4	5	6	6	8	10	12	2.92
	700	0	1	2	2	3	4	5	6	6	8	10	12	2.98
	750	0	1	1	2	2	3	4	5	5	7	8	10	3.34
	800	0	1	1	2	2	3	4	4	5	6	8	9	3.71
	900	0	1	1	2	2	3	4	4	5	6	7	9	3.98
	1000	0	0	1	1	2	2	3	4	4	5	7	8	4.15

Table C.16 Number of Type TC Cables Allowed per Code (3C Multiconductor TC Cable Assembly)
[Based on Fill per 392.22, Table 392.22(A), Column 1, Ampacity per 392.80]

		<u>Ventilated Tray Width [mm (in.)]</u>											
<u>Conductor</u> <u>Insulation</u> <u>Type</u>	<u>Conductor</u> <u>Size</u> <u>(AWG/kcmil)</u>	<u>50</u> <u>(2)</u>	<u>100</u> <u>(4)</u>	<u>150</u> <u>(6)</u>	<u>200(8)</u>	<u>225</u> <u>(9)</u>	<u>300</u> <u>(12)</u>	<u>400</u> <u>(16)</u>	<u>450</u> <u>(18)</u>	<u>500</u> <u>(20)</u>	<u>600</u> <u>(24)</u>	<u>750</u> <u>(30)</u>	<u>900</u> <u>(36)</u>
THHN													
	14	13	27	40	54	61	81	108	122	135	162	202	243
	12	10	21	31	42	47	63	84	94	105	126	157	189
	10	7	15	23	31	35	47	62	70	78	94	117	141
	8	6	12	19	25	28	38	50	57	63	76	101	114
	6	4	8	13	17	19	26	34	39	43	52	65	78
	4	3	6	9	12	14	18	24	27	30	36	45	54
	3	2	5	7	10	11	15	21	23	26	31	38	46
	2	2	4	6	9	10	13	18	20	22	27	33	40
	1	2	4	6	8	9	12	16	18	20	24	30	36
	1/0	1	3	5	7	8	11	15	16	18	22	27	33
	2/0	1	3	4	6	7	9	12	14	16	19	23	28
	3/0	1	2	4	5	6	7	10	11	13	15	19	22
	4/0	1	2	3	5	6	7	10	11	12	15	18	22
	250	1	2	3	4	5	6	9	10	11	13	16	19
	300	1	2	3	4	5	6	8	9	10	12	15	18
	350	1	2	3	4	5	6	8	9	10	12	15	18
	400	0	1	2	3	3	5	7	8	9	11	13	14
	500	0	1	2	3	3	5	7	7	8	10	12	15
	600	0	1	2	3	3	5	5	7	8	10	12	15
	700	0	1	2	3	3	5	6	7	7	8	10	14
	750	0	1	2	2	2	4	5	6	6	8	11	13
	800	0	1	2	2	2	4	5	6	7	8	10	12
	900	0	1	2	2	2	4	5	6	6	8	10	12
	1000	0	1	1	1	1	3	4	5	5	7	9	11

Note: Both aluminum and copper largest commercial cable diameter used.

Table C.16 Number of Type TC Cables Permitted in Cable Tray (3C Multiconductor TC Cable Assembly)
(Based on fill in accordance with 392.22, Table 392.22(A), column 1, ampacity in accordance with 392.80)

Conductor Insulation Type	Conductor Size (AWG/ kcmil)	Ventilated Tray Width [mm (in.)]												Cable Diameter	
		50 (2)	-	100 (4)	200 (8)	225 (9)	300 (12)	400 (16)	450 (18)	500 (20)	600 (24)	750 (30)	900 (36)		
THHN															
	14	12	26	41	52	61	81	104	122	133	162	203	243	0.469	
	12	9	20	32	41	47	63	81	95	104	126	158	189	0.532	
	10	7	15	24	30	35	47	60	71	77	94	118	141	0.616	
	8	5	12	19	24	29	38	49	57	62	76	95	114	0.685	
	6	4	9	13	17	20	26	34	40	43	53	66	79	0.821	
	4	4	8	13	16	19	26	33	38	42	51	64	77	0.834	
	3	3	7	11	14	16	22	28	32	35	43	54	65	0.910	
	2	3	6	9	12	14	18	23	27	30	36	45	55	0.990	
	1	2	4	6	8	10	13	17	19	21	26	32	39	1.175	
		1/0	2	4	6	8	9	12	15	18	20	24	30	36	1.220
		2/0	1	3	5	7	8	10	13	16	17	21	26	31	1.310
		3/0	1	3	4	6	7	9	12	13	15	18	22	27	1.410
		4/0	1	2	3	5	5	7	10	11	12	15	19	23	1.558
	250	1	2	3	4	5	6	9	10	11	13	17	20	1.720	
	300	1	2	3	4	4	6	8	9	10	12	15	18	1.912	
	350	1	2	3	4	4	6	8	9	10	12	15	18	1.953	
	400	0	1	2	3	4	5	7	8	9	11	14	17	2.099	
	500	0	1	2	3	4	5	7	8	8	10	13	16	2.239	
	600	0	1	2	3	3	4	6	7	8	9	12	14	2.433	
	700	0	1	2	3	3	4	6	6	7	9	11	13	2.661	
	750	0	1	2	2	3	4	5	6	7	8	10	13	2.769	
	800	0	1	2	2	3	4	5	6	6	8	10	12	2.988	
	900	0	1	1	2	2	3	5	5	6	7	9	11	3.010	
	1000	0	1	1	2	2	3	4	5	6	7	9	10	3.273	

Table C.17 Number of Type TC Cables Allowed per Code (4C Multiconductor TC Cable Assembly)
[Based on Fill per 392.22, Table 392.22(A), Column 1, Ampacity per 392.80]

		<u>Ventilated Tray Width [mm (in.)]</u>													
<u>Conductor</u> <u>Insulation</u> <u>Type</u>	<u>Conductor</u> <u>Size</u> <u>(AWG/kcmil)</u>	<u>50</u> <u>(2)</u>	<u>100</u> <u>(4)</u>	<u>150</u> <u>(6)</u>	<u>200</u> <u>(8)</u>	<u>225</u> <u>(9)</u>	<u>300</u> <u>(12)</u>	<u>400</u> <u>(16)</u>	<u>450</u> <u>(18)</u>	<u>500</u> <u>(20)</u>	<u>600</u> <u>(24)</u>	<u>750</u> <u>(30)</u>	<u>900</u> <u>(36)</u>	<u>Dia</u> <u>Used</u>	
THHN															
	14	11	23	35	47	53	71	95	107	119	143	182	219	0.49	
	12	9	18	27	36	41	55	73	82	91	110	140	168	0.56	
	10	6	13	20	27	30	41	54	61	68	82	104	125	0.65	
	8	5	10	16	21	24	32	43	49	54	65	83	99	0.73	
	6	4	8	13	17	19	26	34	39	43	52	66	79	0.82	
	4	2	5	7	10	11	15	20	22	25	30	38	46	1.08	
	3	2	4	6	8	9	13	17	19	22	26	33	40	1.15	
	2	1	3	5	7	8	11	15	17	19	22	29	34	1.24	
	1	1	3	4	6	7	9	12	14	16	19	24	29	1.35	
	1/0	1	3	4	6	7	9	12	14	15	18	24	28	1.36	
	2/0	1	2	3	5	6	7	10	11	13	15	20	24	1.49	
	3/0	1	2	3	4	5	6	8	10	11	13	17	20	1.61	
	4/0	1	2	3	4	5	6	9	10	11	13	17	20	1.75	
	250	1	2	3	4	5	6	8	9	10	12	15	18	1.91	

<u>Conductor Insulation Type</u>	<u>Conductor Size (AWG/kcmil)</u>	<u>Ventilated Tray Width [mm (in.)]</u>												<u>Dia Used</u>
		<u>50 (2)</u>	<u>100 (4)</u>	<u>150 (6)</u>	<u>200 (8)</u>	<u>225 (9)</u>	<u>300 (12)</u>	<u>400 (16)</u>	<u>450 (18)</u>	<u>500 (20)</u>	<u>600 (24)</u>	<u>750 (30)</u>	<u>900 (36)</u>	
	300	0	0	0	0	0	0	0	0	0	0	0	0	
	350	0	1	2	3	3	5	7	8	9	10	13	16	2.16
	400	0	0	0	0	0	0	0	0	0	0	0	0	
	500	0	1	2	3	3	4	6	7	7	9	12	14	2.48
	600	0	0	0	0	0	0	0	0	0	0	0	0	
	700	0	0	0	0	0	0	0	0	0	0	0	0	
	750	0	1	1	2	2	3	5	5	6	7	10	12	2.96
	800	0	0	0	0	0	0	0	0	0	0	0	0	
	900	0	0	0	0	0	0	0	0	0	0	0	0	
	1000	0	0	0	0	0	0	0	0	0	0	0	0	

Note: Both aluminum and copper largest commercial cable diameter used.

Table C.17 Number of Type TC Cables Permitted in Cable Tray (4C Multiconductor TC Cable Assembly)
(Based on fill in accordance with 392.22, Table 392.22(A), column 1, ampacity in accordance with 392.80)

Conductor Insulation Type	Conductor Size (AWG/ kcmil)	Ventilated Tray Width [mm (in.)]												Cable Diameter	
		50 (2)	100 (4)	150 (6)	200 (8)	225 (9)	300 (12)	400 (16)	450 (18)	500 (20)	600 (24)	750 (30)	900 (36)		
THHN															
	14	11	24	37	48	56	74	95	111	122	148	186	223	0.49	
	12	8	18	28	37	43	57	73	85	93	114	142	171	0.56	
	10	6	14	21	27	32	42	54	63	69	84	105	127	0.65	
	8	5	11	17	22	25	33	43	50	55	67	84	100	0.73	
	6	3	7	12	15	17	23	30	35	38	46	58	69	0.88	
	4	3	6	10	12	15	19	25	29	32	39	48	58	0.96	
	3	2	5	8	11	12	16	21	25	27	33	41	49	1.041	
	2	2	4	7	9	10	14	18	21	23	28	34	41	1.137	
	1	1	3	5	7	8	10	13	15	17	21	26	31	1.315	
		1/0	1	3	5	6	7	10	12	14	16	19	24	29	1.365
		2/0	1	3	4	5	6	8	10	12	13	16	20	24	1.49
		3/0	1	2	3	4	5	7	9	10	11	14	17	21	1.598
		4/0	2	2	3	4	5	6	9	10	11	13	17	20	1.75
	250	1	2	3	4	4	6	8	9	10	12	15	18	1.91	
	300	0	1	2	3	4	5	7	8	9	11	14	17	2.11	
	350	0	1	2	3	4	5	7	8	9	11	13	16	2.16	
	400	0	1	2	3	3	5	6	7	8	10	12	15	2.35	
	500	0	1	2	3	3	4	6	7	7	9	11	14	2.52	
	600	0	1	2	2	3	4	5	6	7	8	11	13	2.71	
	700	0	1	2	2	3	4	5	6	6	8	10	12	2.91	
	750	0	1	1	2	2	3	5	5	6	7	9	11	3.02	
	800	0	1	1	2	2	3	4	5	6	7	9	10	3.33	
	900	0	1	1	2	2	3	4	4	5	6	8	9	3.69	
	1000	0	0	1	1	2	2	3	4	4	5	7	8	4.02	

Table C.18 Number of Single Conductor Cables Allowed in Cable Tray [Based on Fill per 392.22, Table 392.22(A), Column 1, Ampacity per 392.80]

<u>Ventilated Tray Width [mm (in.)]</u>														
<u>Conductor Insulation Type</u>	<u>Conductor Size (AWG/kcmil)</u>	<u>50 (2)</u>	<u>100 (4)</u>	<u>150 (6)</u>	<u>200 (8)</u>	<u>225 (9)</u>	<u>300 (12)</u>	<u>400 (16)</u>	<u>450 (18)</u>	<u>500 (20)</u>	<u>600 (24)</u>	<u>750 (30)</u>	<u>900 (36)</u>	<u>Dia Used</u>
THHN	1/0	4	8	12	16	18	24	32	36	40	48	61	74	0.486
	2/0	3	7	11	14	16	22	29	33	37	44	56	67	0.532
	3/0	3	6	10	13	15	20	26	30	33	40	51	61	0.584
	4/0	3	6	9	12	14	18	24	27	30	36	46	56	0.642
	250	5	10	16	21	23	32	42	48	53	64	81	98	0.711
	300	4	9	13	18	20	27	37	41	46	55	70	84	0.766
	350	4	8	12	16	18	24	32	36	40	48	61	74	0.817
	400	3	7	10	14	16	21	29	32	36	43	55	66	0.864
	500	3	6	9	12	13	18	24	27	30	36	45	55	0.949
	600	2	4	7	9	10	14	19	22	24	29	37	44	1.051
	700	2	4	6	8	9	12	17	19	21	25	32	39	1.122
	750	2	4	6	8	9	12	16	18	20	24	30	37	1.156
	800	1	3	5	7	8	11	15	17	19	23	29	35	1.188
	900	1	3	5	6	7	10	13	15	17	20	26	31	1.252
	1000	1	3	4	6	7	9	12	13	15	18	22	27	1.31

Table C.18 Number of Single Conductor Cables Permitted in Cable Tray (Based on fill in accordance with 392.22, Table 392.22(A), column 1, ampacity in accordance with 392.80)

Conductor Insulation Type	Conductor Size (AWG/ kcmil)	Ventilated Tray Width [mm (in.)]												Cable Diameter
		50 (2)	100 (4)	150 (6)	200 (8)	225 (9)	300 (12)	400 (16)	450 (18)	500 (20)	600 (24)	750 (30)	900 (36)	
THHN														
	1/0	4	8	12	16	18	24	32	36	40	48	61	74	0.486
	2/0	3	7	11	14	16	22	29	33	37	44	56	67	0.532
	3/0	3	6	10	13	15	20	26	30	33	40	51	61	0.584
	4/0	3	6	9	12	14	18	24	27	30	36	46	56	0.642
250		5	10	16	21	23	32	42	48	53	64	81	98	0.711
300		4	9	13	18	20	27	37	41	46	55	70	84	0.766
350		4	8	12	16	18	24	32	36	40	48	61	74	0.817
400		3	7	10	14	16	21	29	32	36	43	55	66	0.864
500		3	6	9	12	13	18	24	27	30	36	45	55	0.949
600		2	4	7	9	10	14	19	22	24	29	37	44	1.051
700		2	4	6	8	9	12	17	19	21	25	32	39	1.122
750		2	4	6	8	9	12	16	18	20	24	30	37	1.156
800		1	3	5	7	8	11	15	17	19	23	29	35	1.188
900		1	3	5	6	7	10	13	15	17	20	26	31	1.252
1000		1	3	4	6	7	9	12	13	15	18	22	27	1.31

Table C.19 Number of Single Conductor Cables Allowed in Cable Tray [Based on Fill per 392.22, Table 392.22(A), Column 1, Ampacity per 392.80]

<u>Conductor Insulation Type</u>	<u>Conductor Size (AWG/kcmil)</u>	<u>Ventilated Tray Width [mm (in.)]</u>												<u>Dia Used</u>
		<u>50 (2)</u>	<u>100 (4)</u>	<u>150 (6)</u>	<u>200 (8)</u>	<u>225 (9)</u>	<u>300 (12)</u>	<u>400 (16)</u>	<u>450 (18)</u>	<u>500 (20)</u>	<u>600 (24)</u>	<u>750 (30)</u>	<u>900 (36)</u>	

XHHW

<u>Conductor Insulation Type</u>	<u>Conductor Size (AWG/kcmil)</u>	<u>Ventilated Tray Width [mm (in.)]</u>												<u>Dia Used</u>
		<u>50 (2)</u>	<u>100 (4)</u>	<u>150 (6)</u>	<u>200 (8)</u>	<u>225 (9)</u>	<u>300 (12)</u>	<u>400 (16)</u>	<u>450 (18)</u>	<u>500 (20)</u>	<u>600 (24)</u>	<u>750 (30)</u>	<u>900 (36)</u>	
	1/0	4	8	12	16	18	24	32	36	40	49	62	74	0.482
	2/0	3	7	11	14	17	22	29	33	37	44	56	68	0.528
	3/0	3	6	10	13	15	20	27	30	33	40	51	62	0.58
	4/0	3	6	9	12	12	18	24	27	30	37	47	56	0.638
	250	5	10	16	21	24	32	43	49	54	65	83	98	0.705
	300	4	9	14	18	20	28	37	42	47	56	71	85	0.76
	350	4	8	12	16	18	24	33	37	41	49	62	75	0.811
	400	3	7	11	14	16	22	29	33	36	44	56	67	0.858
	500	3	6	9	12	13	18	24	27	30	36	46	55	0.943
	600	2	4	7	9	10	14	19	22	24	29	37	44	1.053
	700	2	4	6	8	9	12	17	19	21	25	32	39	1.124
	750	2	4	6	8	9	12	16	18	20	24	30	37	1.158
	800	1	3	5	7	8	11	15	17	19	23	29	35	1.19
	900	1	3	5	6	7	10	13	15	17	20	26	31	1.254
	1000	1	3	4	6	7	9	12	13	15	18	22	27	1.312

Table C.19 Number of Single Conductor Cables Permitted in Cable Tray (Based on fill in accordance with 392.22, Table 392.22(A), column 1, ampacity in accordance with 392.80)

Conductor Insulation Type	Conductor Size (AWG/ kcmil)	Ventilated Tray Width [mm (in.)]												Cable Diameter
		50 (2)	100 (4)	150 (6)	200 (8)	225 (9)	300 (12)	400 (16)	450 (18)	500 (20)	600 (24)	750 (30)	900 (36)	
XHHW														
	1/0	4	8	12	16	18	24	32	36	40	49	62	74	0.482
	2/0	3	7	11	14	17	22	29	33	37	44	56	68	0.528
	3/0	3	6	10	13	15	20	27	30	33	40	51	62	0.58
	4/0	3	6	9	12	12	18	24	27	30	37	47	56	0.638
250	5	10	16	21	24	32	43	49	54	65	83	98	0.705	
300	4	9	14	18	20	28	37	42	47	56	71	85	0.76	
350	4	8	12	16	18	24	33	37	41	49	62	75	0.811	
400	3	7	11	14	16	22	29	33	36	44	56	67	0.858	
500	3	6	9	12	13	18	24	27	30	36	46	55	0.943	
600	2	4	7	9	10	14	19	22	24	29	37	44	1.053	
700	2	4	6	8	9	12	17	19	21	25	32	39	1.124	
750	2	4	6	8	9	12	16	18	20	24	30	37	1.158	
800	1	3	5	7	8	11	15	17	19	23	29	35	1.19	
900	1	3	5	6	7	10	13	15	17	20	26	31	1.254	
1000	1	3	4	6	7	9	12	13	15	18	22	27	1.312	

Table C.20 Number of Single Conductor Cables Allowed in Cable Tray [Based on Fill per 392.22, Table 392.22(A), Column 1, Ampacity per 392.80]

Conductor Insulation Type	Conductor Size (AWG/kcmil)	Ventilated Tray Width [mm (in.)]												Dia Used
		50 (2)	100 (4)	150 (6)	200 (8)	225 (9)	300 (12)	400 (16)	450 (18)	500 (20)	600 (24)	750 (30)	900 (36)	
		RHW												
	1/0	3	7	11	14	16	22	29	33	37	44	56	67	0.532
	2/0	3	6	10	13	15	20	27	30	34	40	51	62	0.578

		<u>Ventilated Tray Width [mm (in.)]</u>													
<u>Conductor</u> <u>Insulation</u> <u>Type</u>	<u>Conductor</u> <u>Size</u> <u>(AWG/kcmil)</u>	<u>50</u> <u>(2)</u>	<u>100</u> <u>(4)</u>	<u>150</u> <u>(6)</u>	<u>200</u> <u>(8)</u>	<u>225</u> <u>(9)</u>	<u>300</u> <u>(12)</u>	<u>400</u> <u>(16)</u>	<u>450</u> <u>(18)</u>	<u>500</u> <u>(20)</u>	<u>600</u> <u>(24)</u>	<u>750</u> <u>(30)</u>	<u>900</u> <u>(36)</u>	<u>Dia</u> <u>Used</u>	
	3/0	3	6	9	12	14	18	24	28	31	37	47	57	0.63	
	4/0	2	5	8	11	13	17	22	25	28	34	43	52	0.688	
	250	4	9	13	18	20	27	37	41	46	55	70	84	0.765	
	300	4	8	12	16	17	24	32	36	40	48	61	73	0.82	
	350	3	7	10	14	15	21	28	32	35	42	54	65	0.871	
	400	3	6	9	12	14	19	25	28	32	38	49	58	0.918	
	500	2	5	8	10	12	16	21	24	26	32	41	49	1.003	
	600	2	4	6	8	9	13	17	19	21	26	33	40	1.113	
	700	1	3	5	7	8	11	15	17	19	23	29	35	1.184	
	750	1	3	5	7	8	10	14	16	18	21	27	33	1.218	
	800	1	3	5	6	7	10	13	15	17	20	26	31	1.25	
	900	1	3	4	6	7	9	12	14	15	18	23	28	1.314	
	1000	1	2	4	5	6	8	11	12	14	17	21	26	1.372	

Table C.20 Number of Single Conductor Cables Permitted in Cable Tray (Based on fill in accordance with 392.22, Table 392.22(A), column 1, ampacity in accordance with 392.80)

Conductor Insulation Type	Conductor Size (AWG/ kcmil)	Ventilated Tray Width [mm (in.)]												Cable Diameter	
		50 (2)	100 (4)	150 (6)	200 (8)	225 (9)	300 (12)	400 (16)	450 (18)	500 (20)	600 (24)	750 (30)	900 (36)		
RHW															
		<u>1/0</u>	<u>3</u>	<u>7</u>	<u>11</u>	<u>14</u>	<u>16</u>	<u>22</u>	<u>29</u>	<u>33</u>	<u>37</u>	<u>44</u>	<u>56</u>	<u>67</u>	<u>0.532</u>
		<u>2/0</u>	<u>3</u>	<u>6</u>	<u>10</u>	<u>13</u>	<u>15</u>	<u>20</u>	<u>27</u>	<u>30</u>	<u>34</u>	<u>40</u>	<u>51</u>	<u>62</u>	<u>0.578</u>
		<u>3/0</u>	<u>3</u>	<u>6</u>	<u>9</u>	<u>12</u>	<u>14</u>	<u>18</u>	<u>24</u>	<u>28</u>	<u>31</u>	<u>37</u>	<u>47</u>	<u>57</u>	<u>0.63</u>
		<u>4/0</u>	<u>2</u>	<u>5</u>	<u>8</u>	<u>11</u>	<u>13</u>	<u>17</u>	<u>22</u>	<u>25</u>	<u>28</u>	<u>34</u>	<u>43</u>	<u>52</u>	<u>0.688</u>
	<u>250</u>	<u>4</u>	<u>9</u>	<u>13</u>	<u>18</u>	<u>20</u>	<u>27</u>	<u>37</u>	<u>41</u>	<u>46</u>	<u>55</u>	<u>70</u>	<u>84</u>	<u>0.765</u>	
	<u>300</u>	<u>4</u>	<u>8</u>	<u>12</u>	<u>16</u>	<u>17</u>	<u>24</u>	<u>32</u>	<u>36</u>	<u>40</u>	<u>48</u>	<u>61</u>	<u>73</u>	<u>0.82</u>	
	<u>350</u>	<u>3</u>	<u>7</u>	<u>10</u>	<u>14</u>	<u>15</u>	<u>21</u>	<u>28</u>	<u>32</u>	<u>35</u>	<u>42</u>	<u>54</u>	<u>65</u>	<u>0.871</u>	
	<u>400</u>	<u>3</u>	<u>6</u>	<u>9</u>	<u>12</u>	<u>14</u>	<u>19</u>	<u>25</u>	<u>28</u>	<u>32</u>	<u>38</u>	<u>49</u>	<u>58</u>	<u>0.918</u>	
	<u>500</u>	<u>2</u>	<u>5</u>	<u>8</u>	<u>10</u>	<u>12</u>	<u>16</u>	<u>21</u>	<u>24</u>	<u>26</u>	<u>32</u>	<u>41</u>	<u>49</u>	<u>1.003</u>	
	<u>600</u>	<u>2</u>	<u>4</u>	<u>6</u>	<u>8</u>	<u>9</u>	<u>13</u>	<u>17</u>	<u>19</u>	<u>21</u>	<u>26</u>	<u>33</u>	<u>40</u>	<u>1.113</u>	
	<u>700</u>	<u>1</u>	<u>3</u>	<u>5</u>	<u>7</u>	<u>8</u>	<u>11</u>	<u>15</u>	<u>17</u>	<u>19</u>	<u>23</u>	<u>29</u>	<u>35</u>	<u>1.184</u>	
	<u>750</u>	<u>1</u>	<u>3</u>	<u>5</u>	<u>7</u>	<u>8</u>	<u>10</u>	<u>14</u>	<u>16</u>	<u>18</u>	<u>21</u>	<u>27</u>	<u>33</u>	<u>1.218</u>	
	<u>800</u>	<u>1</u>	<u>3</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>10</u>	<u>13</u>	<u>15</u>	<u>17</u>	<u>20</u>	<u>26</u>	<u>31</u>	<u>1.25</u>	
	<u>900</u>	<u>1</u>	<u>3</u>	<u>4</u>	<u>6</u>	<u>7</u>	<u>9</u>	<u>12</u>	<u>14</u>	<u>15</u>	<u>18</u>	<u>23</u>	<u>28</u>	<u>1.314</u>	
	<u>1000</u>	<u>1</u>	<u>2</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>8</u>	<u>11</u>	<u>12</u>	<u>14</u>	<u>17</u>	<u>21</u>	<u>26</u>	<u>1.372</u>	

Supplemental Information

<u>File Name</u>	<u>Description</u> <u>Approved</u>
PC_1336_Table_Edits.xls	For staff use

Submitter Information Verification

Committee: NEC-P08
Submittal Date: Mon Oct 22 15:27:35 EDT 2018

Committee Statement

Committee Statement:

The Note was added to Table C.14 to clarify where the conductor diameters were obtained to determine the number of conductors permitted in a cable tray.

CMP-8 appreciates the additional information within the statement to address questions that were raised during the First Revision meetings.

The term “allowable” was removed per the NEC Style Manual and indicated “Maximum” in the Cable Tray fill tables. The term “used” was removed and the term “cable” was added to the diameter column. Insufficient notes were removed.

NFPA briefly relayed these concerns from the Correlating Committee per the Correlating Committee Note 11. CMP-8 was anticipating a Comment from the Correlating Committee with this information however it was never submitted.

See attached Tables in the Excel Format. All changes were incorporated into these Tables C.14 through C.20.

Response Message:

SR-7575-NFPA 70-2018

[Public Comment No. 1336-NFPA 70-2018 \[Annex C\]](#)

Ballot Results

✔ This item has passed ballot

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.

Crider, Joel (Joey)

Hengst, Kenneth W.

Jackson, Pete

Kendall, David H.

Loyd, Richard E.

Martin, Michael C.

Myers, Paul W.

Roe, Rhett A.

West, Rodney J.



Second Revision No. 7563-NFPA 70-2018 [Section No. Table]

Table 1**Table 1 Percent of Cross Section of Conduit and Tubing for Conductors and Cables**

<u>Number of Conductors and/or Cables</u>	<u>Cross-Sectional Area (%)</u>
1	53
2	31
Over 2	40

Informational Note No. 1: Table 1 is based on common conditions of proper cabling and alignment of conductors where the length of the pull and the number of bends are within reasonable limits. It should be recognized that, for certain conditions, a larger size conduit or a lesser conduit fill should be considered.

Informational Note No. 2: When pulling three conductors or cables into a raceway, if the ratio of the raceway (inside diameter) to the conductor or cable (outside diameter) is between 2.8 and 3.2, jamming can occur. While jamming can occur when pulling four or more conductors or cables into a raceway, the probability is very low.

Notes to Tables

- (1) See Informative Annex C for the maximum number of conductors and fixture wires, all of the same size (total cross-sectional area including insulation) permitted in trade sizes of the applicable conduit or tubing.
- (2) Table 1 applies only to complete conduit or tubing systems and is not intended to apply to sections of conduit or tubing used to protect exposed wiring and cable from physical damage.
- (3) Equipment grounding or bonding conductors, where installed, shall be included when calculating conduit or tubing fill. The actual dimensions of the equipment grounding or bonding conductor (insulated or bare) shall be used in the calculation.
- (4) Where conduit or tubing nipples having a maximum length not to exceed 600 mm (24 in.) are installed between boxes, cabinets, and similar enclosures, the nipples shall be permitted to be filled to 60 percent of their total cross-sectional area, and 310.15(C)(a) (1) adjustment factors need not apply to this condition.
- (5) For conductors not included in Chapter 9, such as multiconductor cables and optical fiber cables, the actual dimensions shall be used.
- (6) For combinations of conductors of different sizes, use actual dimensions or Table 5 and Table 5A for dimensions of conductors and Table 4 for the applicable conduit or tubing dimensions.
- (7) When calculating the maximum number of conductors or cables permitted in a conduit or tubing, all of the same size (total cross-sectional area including insulation), the next higher whole number shall be used to determine the maximum number of conductors permitted when the calculation results in a decimal greater than or equal to 0.8. When calculating the size for conduit or tubing permitted for a single conductor, one conductor shall be permitted when the calculation results in a decimal greater than or equal to 0.8.
- (8) Where bare conductors are permitted by other sections of this *Code*, the dimensions for bare conductors in Table 8 shall be permitted.
- (9) A multiconductor cable, optical fiber cable, or flexible cord of two or more conductors shall be treated as a single conductor for calculating percentage conduit or tubing fill area. For cables that have elliptical cross sections, the cross-sectional area calculation shall be based on using the major diameter of the ellipse as a circle diameter. Assemblies of single insulated conductors without an overall covering shall not be considered a cable when determining conduit or tubing fill area. The conduit or tubing fill for the assemblies shall be calculated based upon the individual conductors.
- (10) The values for approximate conductor diameter and area shown in Table 5 are based on worst-case scenario and indicate round concentric-lay-stranded conductors. Solid and round concentric-lay-stranded conductor values are grouped together for the purpose of Table 5. Round compact-stranded conductor values are shown in Table 5A. If the actual values of the conductor diameter and area are known, they shall be permitted to be used.

Submitter Information Verification

Committee: NEC-P08

Submission Date: Mon Oct 22 14:07:13 EDT 2018

Committee Statement

Committee Statement: Note 4 of Table 1 was revised. The reference to 310.15(B)(3)(a) to 310.15(C)(1) (the reference to 310.15(C)(a) was incorrect and should be 310.15(C)(1))

Response Message: SR-7563-NFPA 70-2018

[Public Comment No. 862-NFPA 70-2018 \[Section No. Table\]](#)

Ballot Results

✔ This item has passed ballot

14 Eligible Voters

1 Not Returned

13 Affirmative All

0 Affirmative with Comments

0 Negative with Comments

0 Abstention

Not Returned

Offerdahl, Donald R.

Affirmative All

Adams, Doug

Berman, Richard J.

Campbell, David M.

Cogburn, Larry D.

Crider, Joel (Joey)

Hengst, Kenneth W.

Jackson, Pete

Kendall, David H.

Loyd, Richard E.

Martin, Michael C.

Myers, Paul W.

Roe, Rhett A.

West, Rodney J.