



## Public Comment No. 1-NFPA 1192-2016 [ New Section after 5.4 ]

### Flame Failure Devices

Fuel-burning ranges and cooktops shall have a flame failure device which prevents the uncontrolled flow of fuel in the absence of a flame.

### Statement of Problem and Substantiation for Public Comment

We continue to hear reports of accidents resulting from a range knob turned ON or bumped inadvertently. In some instances the flame was blown off by a gust of wind.

The requirement for a flame failure device has been in place for the boating industry since 1993, the technology is available, and feasible and ought to be incorporated in fuel burning cooktops for RVs.

#### Related Item

Public Input No. 30-NFPA 1192-2015 [Section No. 6.4.8]

### Submitter Information Verification

**Submitter Full Name:** Zuhair Ibrahim  
**Organization:** Exponent, Inc.  
**Affiliation:** Consultant  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Mon Mar 07 16:29:39 EST 2016

### Committee Statement

**Committee Action:** Rejected but held  
**Resolution:** This is new material. This will be held over to the next revision cycle for review by the Technical Committee.



## Public Comment No. 11-NFPA 1192-2016 [ Section No. 6.1.3 ]

### 6.1.3 – Use of Cellular Foam or Foamed Plastic Materials.

#### 6.1.3.1 –

Cellular foam or foamed plastic materials shall not be used for insulation or interior finish ~~(see 3.3.35, Interior Finish) in recreational vehicles, except for the incidental uses as permitted in~~  
Reject the First Revision changes and delete the entire existing section 6.1.3

~~2.~~

#### 6.1.3.2 –

~~The cellular or foamed plastic materials shall be permitted to be used for incidental use in molding, trim, splash panels, and on doors but only if the material has a maximum thickness of  $\frac{1}{2}$  in. (12.7 mm), a maximum width of 8 in. (204 mm), and does not constitute more than 10 percent of the specific area to which it is attached.~~

### Statement of Problem and Substantiation for Public Comment

This paragraph should be deleted since paragraph 6.1.1 already addresses all materials used for interior finish, including cellular foam materials. If cellular foam or foamed plastic materials are proven to have a flame spread index that does not exceed 200 when tested in accordance with ASTM E84 or ANSL/UL 723 they should be permitted to be installed. This code requirement in 6.1.3 was put in the standard many years ago to address the use of spray on cellular foam materials like those that caused a catastrophic fire at the MGM Grand Hotel in 1980. Today cellular foam can be safely used in many materials that can meet the 6.1.1 flammability requirements, such as fake fireplace brick. Since these materials can meet current 6.1.1 flame spread requirements they should be treated the same as any other interior finish material. Fire codes for the RV application have always been based on the philosophy that the occupant should exit the RV as quickly as possible and only then try to save the RV.

#### Related Item

First Revision No. 30-NFPA 1192-2015 [Section No. 6.1.3]

### Submitter Information Verification

**Submitter Full Name:** Roger Garrett

**Organization:** Patrick Industries

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Apr 08 10:12:21 EDT 2016

### Committee Statement

**Committee Action:** Rejected but see related SR

**Resolution:** SR-1-NFPA 1192-2016

**Statement:** This paragraph should be deleted since paragraph 6.1.1 already addresses all materials used for interior finish, including cellular foam materials. If cellular foam or foamed plastic materials are proven to have a flame spread index that does not exceed 200 when tested in accordance with ASTM E84 or ANSL/UL 723 they should be permitted to be installed. This code requirement in 6.1.3 was put in the standard many years ago to address the use of spray on cellular foam materials like

those that caused a catastrophic fire at the MGM Grand Hotel in 1980. Today cellular foam can be safely used in many materials that can meet the 6.1.1 flammability requirements, such as fake fireplace brick. Since these materials can meet current 6.1.1 flame spread requirements they should be treated the same as any other interior finish material. Fire codes for the RV application have always been based on the philosophy that the occupant should exit the RV as quickly as possible and only then try to save the RV.



## Public Comment No. 20-NFPA 1192-2016 [ Section No. 6.1.3 ]

~~6.1.3 – Use of Cellular Foam or Foamed Plastic Materials.~~

~~6.1.3.1 –~~

~~Cellular foam or foamed plastic materials shall not be used for insulation or interior finish (see 3.3.35, Interior Finish) in recreational vehicles, except for the incidental uses as permitted in 6.1.3.2 .~~

~~6.1.3.2 –~~

~~The cellular or foamed plastic materials shall be permitted to be used for incidental use in molding, trim, splash panels, and on doors but only if the material has a maximum thickness of  $\frac{1}{2}$  in. (12.7 mm), a maximum width of 8 in. (204 mm), and does not constitute more than 10 percent of the specific area to which it is attached.~~

### Statement of Problem and Substantiation for Public Comment

This paragraph should be deleted since paragraph 6.1.1 already addresses all materials used for interior finish, including cellular foam materials. If cellular foam or foamed plastic materials are proven to have a flame spread index that does not exceed 200 when tested in accordance with ASTM E84 or ANSL/UL 723 they should be permitted to be installed. This code requirement in 6.1.3 was put in the standard many years ago to address the use of spray on cellular foam materials like those that caused a catastrophic fire at the MGM Grand hotel in 1980. Today cellular foam can be safely used in many materials that can meet the 6.1.1 flammability requirements, such as fake fireplace brick. Since these materials can meet current 6.1.1 flame spread requirements they should be treated the same as any other interior finish material. Fire codes for the RV application have always been based on the philosophy that the occupant should exit the RV as quickly as possible and only then try to save the RV

#### Related Item

[First Revision No. 30-NFPA 1192-2015 \[Section No. 6.1.3\]](#)

### Submitter Information Verification

**Submitter Full Name:** Kent Perkins

**Organization:** Recreation Vehicle Industry As

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu May 12 14:12:08 EDT 2016

### Committee Statement

**Committee Action:** Rejected but see related SR

**Resolution:** [SR-1-NFPA 1192-2016](#)

**Statement:** This paragraph should be deleted since paragraph 6.1.1 already addresses all materials used for interior finish, including cellular foam materials. If cellular foam or foamed plastic materials are proven to have a flame spread index that does not exceed 200 when tested in accordance with ASTM E84 or ANSL/UL 723 they should be permitted to be installed. This code requirement in 6.1.3 was put in the standard many years ago to address the use of spray on cellular foam materials like those that caused a catastrophic fire at the MGM Grand Hotel in 1980. Today cellular foam can be safely used in many materials that can meet the 6.1.1 flammability requirements, such as fake fireplace brick. Since these materials can meet current 6.1.1 flame spread requirements they should

be treated the same as any other interior finish material. Fire codes for the RV application have always been based on the philosophy that the occupant should exit the RV as quickly as possible and only then try to save the RV.



## Public Comment No. 18-NFPA 1192-2016 [ Section No. 6.4.5.3 ]

### 6.4.5.3

Generator exhaust pipe shall be secured and supported every 4 ft (1.2 m) within the run, or according to the installation instructions .

### Statement of Problem and Substantiation for Public Comment

There exist installation instructions for RV generators that require tailpipe hangers on pipe over 1 ½ ft. are to be at intervals of 3 ft. or less.

Therefore the additional language would allow for following the installation instructions that might call out specific criteria.

#### Related Item

First Revision No. 34-NFPA 1192-2015 [Section No. 6.4.5.2.4]

### Submitter Information Verification

**Submitter Full Name:** Joe Kleinknight

**Organization:** Keystone RV Company

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Apr 11 08:03:32 EDT 2016

### Committee Statement

**Committee Action:** Rejected but see related SR

**Resolution:** SR-2-NFPA 1192-2016

**Statement:** There exist installation instructions for RV generators that require tailpipe hangers on pipe over 1 ½ ft. are to be at intervals of 3 ft. or less. Therefore the additional language would allow for following the installation instructions that might call out specific criteria.



## Public Comment No. 19-NFPA 1192-2016 [ Section No. 6.4.6.5 ]

### 6.4.6.5

In recreation vehicles having a permanent wall of separation between the cargo area and the living area, an additional listed portable fire extinguisher with a minimum rating of 10-B:C, as defined in NFPA 10 shall be provided in the special transportation area within 24 in. (610 mm) of the exterior door that serves the special transportation area. In recreational vehicles without a permanent wall of separation between the cargo area and the living area, at least one listed portable fire extinguisher with a minimum rating of 10-B:C shall be provided within 24 in. (610mm) of the exterior door that serves the special transportation and will satisfy the requirement in section 6.4.1.2 and 6.4.1.3.

### Statement of Problem and Substantiation for Public Comment

The first draft revision would allow recreational vehicles without a permanent wall of separation between the cargo area and living area to be provided with only a 5-B:C rated fire extinguisher. The first draft revision would also not require a fire extinguisher in an RV with a non-separated cargo area unless it had a 120/240V electrical system or fuel burning equipment per section 6.4.1.3. In either situation the protection is not adequate for the ordinary hazard classification of this area per NFPA 10 table 6.3.1.1. The proposed revision would still allow only the single fire extinguisher in RV's with non-separated cargo areas.

#### Related Item

First Revision No. 37-NFPA 1192-2015 [Section No. 6.4.7.5]

First Revision No. 32-NFPA 1192-2015 [Section No. 6.4.1]

### Submitter Information Verification

**Submitter Full Name:** Craig Sedlacek

**Organization:** Washington State Department of Labor and Industries

**Affiliation:** Industry regulator for Washington State.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Wed May 11 14:51:51 EDT 2016

### Committee Statement

**Committee Action:** Rejected but see related SR

**Resolution:** SR-3-NFPA 1192-2016

**Statement:** This addresses the negative comment that correctly pointed out that a 10 B:C fire extinguisher should still be required for a towable special transportation unit without a wall of separation. This new paragraph would provide that language.



## Public Comment No. 21-NFPA 1192-2016 [ Section No. 6.4.6.5 ]

### 6.4.6.5.1

In recreation vehicles having a permanent wall of separation between the cargo area and the living area, an additional listed portable fire extinguisher with a minimum rating of 10-B:C, as defined in NFPA 10 shall be provided in the special transportation area within 24 in. (610 mm) of the exterior door that serves the special transportation area.

6.4.6.5.2 In towable recreation vehicles without a permanent wall of separation between the cargo area and the living area, the fire extinguisher required by 6.4.1.3 shall have a minimum rating of 10-B:C, as defined in NFPA 10, Standard for Portable Fire Extinguishers.

### Statement of Problem and Substantiation for Public Comment

This addresses the negative comment that correctly pointed out that a 10 B:C fire extinguisher should still be required for a towable special transportation unit without a wall of separation. This new paragraph would provide that language.

#### Related Item

First Revision No. 37-NFPA 1192-2015 [Section No. 6.4.7.5]

### Submitter Information Verification

**Submitter Full Name:** Kent Perkins  
**Organization:** Recreation Vehicle Industry As  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Thu May 12 14:16:04 EDT 2016

### Committee Statement

**Committee Action:** Rejected but see related SR  
**Resolution:** SR-3-NFPA 1192-2016  
**Statement:** This addresses the negative comment that correctly pointed out that a 10 B:C fire extinguisher should still be required for a towable special transportation unit without a wall of separation. This new paragraph would provide that language.



## Public Comment No. 22-NFPA 1192-2016 [ Section No. 6.6.2 ]

### 6.6.

2- Smoke Alarms

### 3 Handrails .

In addition to the smoke alarm required by Section

#### 6.6.3

, each loft area shall have at least one smoke alarm installed that shall comply with 6.3.1.3 through 6.3.1.5 .

.1 Handrails. Handrails having minimum and maximum heights of 30 in. and 38 in. (762 mm and 965 mm), respectively, measured vertically from the nosing of the treads shall be provided on at least one side of stairways that extends at least 5 ft. above the main RV floor.

6.6.3.1.1 Spiral stairways shall have the required handrail located on the outside radius. All required handrails shall be continuous the full length of the stairs.

6.6.3.1.2 Ends shall be returned or shall terminate in newel posts or safety terminals. Handrails adjacent to a wall shall have a space not less than 1½ in. (38 mm) between the wall and the handrail.

6.6.3.2 Handrail Grip Size. Handrails shall have either a circular cross-section with a diameter of 1¼ in. (32 mm) to 2 in. (51 mm) or a non-circular cross-section with a perimeter of at least 4 in. (102 mm) but not more than 6¼ in. (159 mm) and a largest cross-section dimension not exceeding 2¼ in. (57 mm).

6.6.3.2.1 Edges shall have a minimum radius of ? in. (3 mm).

#### 6.6.4 Guardrails.

6.6.4.1 Guardrails. Guardrails on open sides of stairways and lofts shall have intermediate rails or ornamental closures, which do not allow passage of an object 4 in. (102 mm) or more in diameter.

6.6.4.1.1 Lofts shall have guardrails not less than 36 in. (914mm) in height or one-half (½) the maximum clear height to the ceiling, whichever is less.

6.6.4.1.2 Open sides of stairs to lofts shall have guardrails not less than 34 in. (864 mm) in height measured vertically from the nosing of the treads.

3.3.XX Loft . An additional raised interior habitable area that is directly below the ceiling of an RV and is accessible by a stairway and at least 5 ft. (1.524 m) above the RV main floor.

## Statement of Problem and Substantiation for Public Comment

Adding this definition clarifies what would constitute a loft area in an RV. Smoke alarm requirements are already covered by existing section 6.3.1, and that section does not require separated sleeping areas to have an additional smoke alarm. Adding handrail and guardrail requirements enhances safety.

### Related Item

First Revision No. 58-NFPA 1192-2015 [New Section after 6.5.2]

## Submitter Information Verification

**Submitter Full Name:** Kent Perkins

**Organization:** Recreation Vehicle Industry As

**Street Address:**

**City:**

**State:**

**Zip:**

**Submission Date:** Thu May 12 14:23:56 EDT 2016

## Committee Statement

**Committee** Rejected but see related SR

**Action:**

**Resolution:** [SR-10-NFPA 1192-2016](#)

**Statement:** The current section 6.6.1, 6.6.1.1 and 6.6.1.2 identified in the First Revision No. 58 are unnecessary. A raised interior area would not be deemed to have to meet additional exit requirements as existing requirements apply. In addition, section 6.6.2 smoke alarms, identified in the First Revision No. 58 is unnecessary because the current NFPA 1192 Section 6.3.1 smoke alarm requirements adequately address this concern. The definition of "loft" has been revised (3.3.36) to better address what a loft is and identifies specific exemptions for clarification.



## Public Comment No. 2-NFPA 1192-2016 [ Section No. 7.3.7.3 ]

### 7.3.7.3

Potable water tanks ~~shall be secured in place so they do not become dislodged~~ shall stay retained in place when a load equal to ~~two times~~ the holding tank's filled weight is applied to the filled holding tank in any direction except upward.

### Statement of Problem and Substantiation for Public Comment

It was the committee's intent that the water tank does not fall off the vehicle. As the first draft was written it would state the water tank can not move when subjected to a force 2x the filled weight of the tank.

#### Related Item

First Revision No. 48-NFPA 1192-2015 [New Section after 7.3.7.2]

### Submitter Information Verification

**Submitter Full Name:** Dale Jordal  
**Organization:** Winnebago Industries, Inc.  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Mon Mar 28 12:57:22 EDT 2016

### Committee Statement

**Committee Action:** Rejected but see related SR  
**Resolution:** SR-4-NFPA 1192-2016  
**Statement:** The committee recognizes the submitter's concern but does require two times the weight be used when calculating restraint of potable water tanks.



## Public Comment No. 6-NFPA 1192-2016 [ Section No. 7.3.7.4 ]

### 7.3.7.4

The tank manufacturer shall provide within their installation instructions ~~on how a potable water statement requiring tank is- securement~~ to be secured- in accordance with 7.3.7.3 .

### Statement of Problem and Substantiation for Public Comment

Tank manufacturers typically do not include materials such as frame members or removable cross members nor the strapping materials needed to accomplish the securement requirements to meet the 7.3.7.3 or 7.5.1.1/7.5.1.2. Tank manufacturers should not be required to champion the method due to the wide variations of RV structures and frame configurations and sizes. They can however require that the install meets the standard and supply needed information about the tank such as size and capacity.

#### Related Item

First Revision No. 48-NFPA 1192-2015 [New Section after 7.3.7.2]

First Revision No. 47-NFPA 1192-2015 [Section No. 7.5.1]

### Submitter Information Verification

**Submitter Full Name:** Lindy Roberts

**Organization:** Recreational Vehicle Industry

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Apr 01 10:04:11 EDT 2016

### Committee Statement

**Committee** Accepted

**Action:**

**Resolution:** SR-5-NFPA 1192-2016

**Statement:** Tank manufacturers typically do not include materials such as frame members or removable cross members nor the strapping materials needed to accomplish the securement requirements to meet the 7.3.7.3 or 7.5.1.1/7.5.1.2. Tank manufacturers should not be required to champion the method due to the wide variations of RV structures and frame configurations and sizes. They can however require that the install meets the standard and supply needed information about the tank such as size and capacity.



## Public Comment No. 23-NFPA 1192-2016 [ Section No. 7.3.7.5 ]

### 7.3.7.5\*

Tanks that allow filling from the pressure water piping system shall have a vent with an inside diameter, including fittings, larger than or equal to the pressure fill pipe's inside diameter, including fittings.

### Statement of Problem and Substantiation for Public Comment

The tank vent only needs to be equal in size to the pressure fill pipe, not larger. The addition of the word "pressure" provides needed clarification.

#### Related Item

First Revision No. 44-NFPA 1192-2015 [New Section after 7.3.7.3]

### Submitter Information Verification

**Submitter Full Name:** Kent Perkins

**Organization:** Recreation Vehicle Industry As

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu May 12 14:30:27 EDT 2016

### Committee Statement

**Committee Action:** Rejected but see related SR

**Resolution:** SR-6-NFPA 1192-2016

**Statement:** The tank vent only needs to be equal in size to the pressure fill pipe, not larger. The addition of the word "pressure" provides needed clarification.



## Public Comment No. 3-NFPA 1192-2016 [ Section No. 7.3.7.5 ]

### 7.3.7.5 \*

Tanks that allow filling from the pressure water piping system shall have a vent with an inside diameter, including fittings, equal to or larger than the fill pipe's inside diameter, including fittings.

### Statement of Problem and Substantiation for Public Comment

The intent was that the vent could not be smaller than the fill tube. The first draft should have been written with the words " Equal or " prior to the wording " larger than the fill pipe's inside diameter, including fittings.

#### Related Item

First Revision No. 44-NFPA 1192-2015 [New Section after 7.3.7.3]

### Submitter Information Verification

**Submitter Full Name:** Dale Jordal  
**Organization:** Winnebago Industries, Inc.  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Mon Mar 28 13:20:50 EDT 2016

### Committee Statement

**Committee Action:** Rejected but see related SR  
**Resolution:** SR-6-NFPA 1192-2016  
**Statement:** The tank vent only needs to be equal in size to the pressure fill pipe, not larger. The addition of the word "pressure" provides needed clarification.



## Public Comment No. 4-NFPA 1192-2016 [ Section No. 7.5.1.2 ]

### 7.5.1.2

Waste holding tanks shall be secured in place so they do not become dislodged shall stay retained when a load equal to ~~two times~~ the holding tank's filled weight is applied to the filled holding tank in any direction except upward.

### Statement of Problem and Substantiation for Public Comment

It was the committee's intent that the hold tank does not fall off the vehicle. At the first draft is witten it would state the holding tank can not move when subjected to a force of 2x the filled weight of the tank.

#### Related Item

First Revision No. 47-NFPA 1192-2015 [Section No. 7.5.1]

### Submitter Information Verification

**Submitter Full Name:** Dale Jordal  
**Organization:** Winnebago Industries, Inc.  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Mon Mar 28 13:31:02 EDT 2016

### Committee Statement

**Committee Action:** Rejected but see related SR  
**Resolution:** SR-7-NFPA 1192-2016  
**Statement:** The committee recognizes the submitter's concern but does require two times the weight be used when calculating restraint of holding tanks.



## Public Comment No. 8-NFPA 1192-2016 [ Section No. 7.5.1.3 ]

### 7.5.1.3

The tank manufacturer shall provide instructions on how a waste holding tank is to be within their instructions a statement requiring the waste tank be secured in accordance with 7.5.1.2 .

### Statement of Problem and Substantiation for Public Comment

Tank manufacturers typically do not include materials such as frame members or removable cross members nor the strapping materials needed to accomplish the securement requirements to meet the 7.5.1.1/7.5.1.2. Tank manufacturers should not be required to champion the method due to the wide variations in RV construction and frame sizes and configurations. However they can supply needed information such as tank size and capacity.

#### Related Item

First Revision No. 48-NFPA 1192-2015 [New Section after 7.3.7.2]

First Revision No. 47-NFPA 1192-2015 [Section No. 7.5.1]

### Submitter Information Verification

**Submitter Full Name:** Lindy Roberts

**Organization:** Recreational Vehicle Industry

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Apr 01 11:11:39 EDT 2016

### Committee Statement

**Committee Action:** Rejected but see related SR

**Resolution:**

SR-8-NFPA 1192-2016

**Statement:** Tank manufacturers typically do not include materials such as frame members or removable cross members nor the strapping materials needed to accomplish the securement requirements to meet the 7.5.1.1/7.5.1.2. Tank manufacturers should not be required to champion the method due to the wide variations in RV construction and frame sizes and configurations. However they can supply needed information such as tank size and capacity.



## Public Comment No. 5-NFPA 1192-2016 [ Section No. 7.5.2.2 ]

### 7.5.2.2

Neither the inlet nor vent fitting shall extend downward into the tank more than ~~3/4~~ - than 1/2 in. ( 19 13 mm).

### Statement of Problem and Substantiation for Public Comment

The first draft proposal as written would conflict with IAPMO TS2-2015 which states 13mm is the max depth for a vent into a tank.

#### Related Item

First Revision No. 49-NFPA 1192-2015 [Section No. 7.5.2.2]

### Submitter Information Verification

**Submitter Full Name:** Dale Jordal

**Organization:** Winnebago Industries, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Mar 28 13:42:28 EDT 2016

### Committee Statement

**Committee Action:** Rejected

**Resolution:** The 3/4" is practical in field usage and does not reduce safety.