

# Group A

# 2027 ICC – ARMA Code Change Proposal Concepts

(All must be updated to 2024 I-Code)

## ICC22

### Comprehensive revision of vent provisions in IWUIC (combine ICC17, ICC19 and ICC20).

#### 2024 IWUIC STAFF DRAFT VERSION (based on WUIC14-21 and WUIC15-21)

**504.10 Vents.** Where provided, ~~ventilation openings for enclosed attics, gable ends, ridge ends, under eaves and cornices, enclosed eave soffit spaces, enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters, underfloor ventilation, foundations and crawl spaces, or any other opening intended to permit ventilation, either in a horizontal or vertical surface,~~ shall be in accordance with Section 504.10.1 ~~or Section 504.10.2~~ to resist building ignition from the intrusion of burning embers and flame through the ventilation openings.

**Exception:** Ventilation openings for plumbing, mechanical ventilation, heating and cooling equipment and appliances, exhaust systems, and boilers and water heaters.

**504.10.1 Performance requirements.** Ventilation openings shall be fully covered with ~~listed~~ vents, that are tested and listed in accordance with ASTM E2886, to demonstrate compliance with all the following requirements:

1. There shall be no flaming ignition of the cotton material during the Ember Intrusion Test.
2. There shall be no flaming ignition during the Integrity Test portion of the Flame Intrusion Test.
3. The maximum temperature of the ~~unexposed interior~~ side of the vent shall not exceed 662°F (350°C).

**Exception:** Ventilation openings in roof ridges, roof hips, and roof sloped surfaces shall be covered with noncombustible, corrosion-resistant mesh with openings not to exceed 1/8 inch (3.2 mm).

**Exception:** Ventilation openings for which listed vents tested in accordance with ASTM E2886 are not available shall be covered with noncombustible, corrosion-resistant mesh with openings not to exceed 1/8 inch (3.2 mm).

**504.10.2 Prescriptive requirements.** Where provided, ~~attic ventilation openings, foundation or underfloor vents, or other ventilation openings in vertical or horizontal surfaces and vents through roofs shall not exceed 144 square inches (0.0929 m<sup>2</sup>) each. Such vents shall be covered with noncombustible corrosion-resistant mesh with openings not to exceed 1/8 inch (3.2 mm) or shall be designed and approved to prevent flame or ember penetration into the structure.~~

**504.10.23 Vent locations.** ~~Attic ventilation openings shall not be located in soffits, in eave overhangs, between rafters at eaves, or in other overhang areas.~~ Gable end and dormer vents shall be located not less than 10 feet (3048 mm) from lot lines. Underfloor ventilation openings shall be located as close to grade as practical.

**505.10 Vents.** Where provided, ~~ventilation openings for enclosed attics, gable ends, ridge ends, under eaves and cornices, enclosed eave soffit spaces, enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters, underfloor ventilation, foundations and crawl spaces, or any other opening intended to permit ventilation, either in a horizontal or vertical surface,~~ shall be in accordance with Section 505.10.1 ~~or Section 505.10.2~~ to resist building ignition from the intrusion of burning embers and flame through the ventilation openings.

**Exception:** Ventilation openings for plumbing [IPC], mechanical ventilation [IMC], heating and cooling equipment and appliances, exhaust systems, and boilers and water heaters.

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**505.10.1 Performance Requirements.** Ventilation openings shall be fully covered with ~~listed~~ vents; ~~that are tested and listed~~ in accordance with ASTM E2886, to demonstrate compliance with all the following requirements:

1. There shall be no flaming ignition of the cotton material during the Ember Intrusion Test.
2. There shall be no flaming ignition during the Integrity Test portion of the Flame Intrusion Test.
3. The maximum temperature of the ~~unexposed interior~~ side of the vent shall not exceed 662°F (350°C).

**Exception:** Ventilation openings in roof ridges, roof hips, and roof sloped surfaces shall be covered with noncombustible, corrosion-resistant mesh with openings not to exceed 1/8 inch (3.2 mm).

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## Reason Statement

The IWUIC provisions for vents in sections 504.10 and 505.10 are complex and in some cases contradictory. This proposal both simplifies and strengthens existing provisions by making modifications discussed in the following sections.

**Sections 504.10.1, 504.10.2 (current), 505.10.1, and 505.10.2 (current).** Existing language allows compliance via either performance or prescriptive options. The performance option assesses ventilation opening coverings for both resistance to ember penetration and resistance to flame intrusion. In contrast, the prescriptive option addresses only ember penetration by prescribing a maximum mesh size which has been demonstrated to effectively reduce entrance of embers of sufficient size to ignite materials on which the embers land [ADD IBHS RESEARCH STUDY TO BIBLIOGRAPHY]. This proposal transitions the prescriptive option into an exception and restricts its application to roof vents. The current version of ASTM E2886 does not permit testing of roof ridge and hip vents and vents installed on roof sloped surfaces, which is an important reason to retain the exception. This proposal also removes the vent opening size limitation of 144 square inches, which is not technically justified for vent opening covers which comply with the provisions of these sections. [RESEARCH HISTORY OF 144 SQIN]

**Sections 504.10 and 505.10.** The proposal simplifies the description of situations in which the provisions apply. The issue is preventing embers (and flames) from intruding into the building interior and causing ignition. The list of potential types and locations for vents and the indication that the requirements only apply to openings in horizontal and vertical surfaces are both unnecessary. The section charging language is simplified so it applies to all openings in the building envelope. An exception is added for certain ventilation openings which have not been shown to create issues in wildland-urban interface fires. [CHECK RESEARCH; DISCUSS WITH IBHS]

**Sections 504.10.3 and 505.10.3 (changed by proposal to 504.10.2 and 505.10.2).** Existing language of Sections 504.10 and 505.10 permit ventilation opening locations which are expressly excluded by Sections 504.10.3 and 505.10.3. This proposal makes the requirements applicable to all ventilation openings (except those in the exception), which makes the prescriptive prohibitions in 504.10.3 and 505.10.3 unnecessary, because vent covers must either resist ember and flame intrusion as determined by ASTM E2886 or resist ember penetration via a prescriptively prescribed mesh.

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## CLEAN VERSION

**504.10 Vents.** Where provided, openings intended to permit ventilation shall be in accordance with Section 504.10.1 to resist building ignition from the intrusion of burning embers and flames through the ventilation openings.

**Exception:** Ventilation openings for plumbing [IPC], mechanical ventilation [IMC], heating and cooling *equipment* and *appliances*, exhaust systems, and boilers and water heaters.

**504.10.1 Performance requirements.** Ventilation openings shall be fully covered with vents that are tested and *listed* in accordance with ASTM E2886, to demonstrate compliance with all the following requirements:

1. There shall be no flaming ignition of the cotton material during the Ember Intrusion Test.
2. There shall be no flaming ignition during the Integrity Test portion of the Flame Intrusion Test.
3. The maximum temperature of the interior side of the vent shall not exceed 662°F (350°C).

**Exception:** Ventilation openings in roof ridges, roof hips, and roof sloped surfaces shall be covered with noncombustible, corrosion-resistant mesh with openings not to exceed 1/8 inch (3.2 mm).

**504.10.2 Vent locations.** Gable end and dormer vents shall be located not less than 10 feet (3048 mm) from lot lines. Underfloor ventilation openings shall be located as close to grade as practical.

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**Exception:** Ventilation openings for plumbing [IPC], mechanical ventilation [IMC], heating and cooling *equipment* and *appliances*, exhaust systems, and boilers and water heaters.

**505.10.1 Performance Requirements.** Ventilation openings shall be fully covered with vents that are tested and *listed* in accordance with ASTM E2886, to demonstrate compliance with all the following requirements:

1. There shall be no flaming ignition of the cotton material during the Ember Intrusion Test.
2. There shall be no flaming ignition during the Integrity Test portion of the Flame Intrusion Test.
3. The maximum temperature of the interior side of the vent shall not exceed 662°F (350°C).

**Exception:** Ventilation openings in roof ridges, roof hips, and roof sloped surfaces shall be covered with noncombustible, corrosion-resistant mesh with openings not to exceed 1/8 inch (3.2 mm).

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## ICC15

### Provide avenue for valley lining options in addition to D3909.

#### BACKGROUND

Address common situation in WUI codes where D3909 is the only underlayment option.

#### IWUIC

#### OPTION C

**504.2.1 Roof valleys.** Where provided, valley flashings shall run the full length of the valley and be not less than 0.019 inch (0.48 mm) (No. 26 galvanized sheet gage) corrosion-resistant metal installed over a minimum 36-inch-wide (914 mm) underlayment consisting of one layer of 72-pound (32.4 kg) mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 ~~running the full length of the valley or a roof assembly that is classified as Class A in accordance with ASTM E108 or UL 790.~~

**505.2.1 Roof valleys.** Where provided, valley flashings shall be not less than 0.019-inch (0.48 mm) (No. 26 galvanized sheet gage) corrosion-resistant metal installed over a minimum 36-inch-wide (914 mm) underlayment consisting of one layer of 72-pound (32.4 kg) mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 running the full length of the valley.

**506.2.1 Roof valleys.** Where provided, valley flashings shall be not less than 0.019-inch (0.44 mm) (No. 26 galvanized sheet gage) corrosion-resistant metal installed over a minimum 36-inch-wide (914 mm) underlayment consisting of one layer of 72-pound (32.4 kg) mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 running the full length of the valley.

**REASON.** The existing prescriptive valley flashing requirement is restrictive and may present long-term issues with function of the installed valley due to abrasion of the corrosion resistant valley metal by granules on the underlying D3909 sheet. The proposal retains the existing option but also permits a valley to be constructed with any roof assembly which bears an ASTM E108 or UL 790 Class A classification.

Use of exposed metal in valleys is one appropriate practice in wildland-urban interface areas and the existing prescriptive construction offers additional protection to these areas where debris may accumulate and ignite in a wildfire or where wind-blown embers may accumulate during a wildfire. The proposed change permits other valley constructions which have demonstrated equivalent fire resistance to assemblies permitted to be installed as the field of the roof.

#### OPTION D

**504.2.1 Roof valleys.** Where provided, valley flashings shall run the full length of the valley and comply with either 504.2.1.1 or 504.2.1.2.

**504.2.1.2. Prescriptive Requirements.** Valley shall consist of ~~be~~ not less than 0.019 inch (0.48 mm) (No. 26 galvanized sheet gage) corrosion-resistant metal installed over a minimum 36-inch-wide (914 mm) underlayment consisting of one layer of 72-pound (32.4 kg) mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 ~~running the full length of the valley.~~

**504.2.1.2. Performance Requirements.** Valley shall consist of a roof assembly that is classified as Class A in accordance with ASTM E108 or UL 790.

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## ICC24

### Remove D3909 weight requirement when used as eave protection or valley lining.

#### BACKGROUND

Address common situation in WUI codes where D3909 is prescribed but also has an associated weight minimum which is above the minimum in the standard.

WUIC22-06/07 added the requirement for D3909 as valley lining and the associated weight provision. There appears to be no technical justification for the weight.

WUIC21-06/07 added the requirement for D3909 as eave protection and the associated weight provision. There appears to be no technical justification for the weight.

#### IWUIC

**504.2 Roof assembly.** Roofs shall have a *roof assembly* that complies with a Class A rating when tested in accordance with ASTM E108 or UL 790. For *roof assemblies* where the profile allows a space between the *roof covering* and *roof deck*, the space at the eave ends shall be firestopped to preclude entry of flames or embers, or have one layer of ~~72-pound (32.4 kg) mineral-surfaced, nonperforated cap sheet~~ asphalt roll roofing complying with ASTM D3909 installed over the combustible *roof deck*.

##### Exceptions:

1. Class A *roof assemblies* include those with coverings of brick, masonry or an exposed concrete *roof deck*.
2. Class A *roof assemblies* also include ferrous or copper shingles or sheets, metal sheets and shingles, clay or concrete roof tile or slate installed on noncombustible decks or ferrous, copper or metal sheets installed without a *roof deck* on noncombustible framing.
3. Class A *roof assemblies* include minimum 16 oz/sq. ft. (0.0416 kg/m<sup>2</sup>) copper sheets installed over combustible *roof decks*.

**504.2.1 Roof valleys.** Where provided, valley flashings shall be not less than 0.019 inch (0.48 mm) (No. 26 galvanized sheet gage) corrosion-resistant metal installed over a minimum 36-inch-wide (914 mm) underlayment consisting of one layer of ~~72-pound (32.4 kg) mineral-surfaced, nonperforated cap sheet~~ roll roofing complying with ASTM D3909 running the full length of the valley.

**505.2 Roof assembly.** Roofs shall have a *roof assembly* that complies with not less than a Class A rating when tested in accordance with ASTM E108 or UL 790, or an *approved noncombustible roof covering*. For *roof assemblies* where the profile allows a space between the *roof covering* and *roof deck*, the space at the eave ends shall be firestopped to preclude entry of flames or embers, or have one layer of ~~cap sheet~~ mineral-surfaced, asphalt roll roofing complying with ASTM D3909 installed over the combustible *roof deck*.

**505.2.1 Roof valleys.** Where provided, valley flashings shall be not less than 0.019-inch (0.48 mm) (No. 26 galvanized sheet gage) corrosion-resistant metal installed over a minimum 36-inch-wide (914 mm) underlayment consisting of one layer of ~~72-pound (32.4 kg) mineral-surfaced, nonperforated cap sheet~~ asphalt roll roofing complying with ASTM D3909 running the full length of the valley.

**506.2 Roof assembly.** Roofs shall have a *roof assembly* that complies with not less than a Class B rating when tested in accordance with ASTM E108 or UL 790 or an *approved noncombustible roof covering*. For *roof*

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*assemblies* where the profile allows a space between the *roof covering* and *roof deck*, the space at the eave ends shall be firestopped to preclude entry of flames or embers, or have one layer of ~~cap sheet mineral-surfaced, asphalt roll roofing~~ complying with ASTM D3909 installed over the combustible *roof deck*.

**506.2.1 Roof valleys.** Where provided, valley flashings shall be not less than 0.019-inch (0.44 mm) (No. 26 galvanized sheet gage) corrosion-resistant metal installed over a minimum 36-inch-wide (914 mm) underlayment consisting of one layer of ~~72 pound (32.4 kg) mineral-surfaced, nonperforated cap sheet~~ asphalt roll roofing complying with ASTM D3909 running the full length of the valley.

**Rationale:** The provision for D3909 cap sheet as an eave protection material was added into the 2009 IWUIC through action by the California Office of the State Fire Marshall, whose original proposal (WUIC21-06/07) was modified by the Committee to change the description from “No. 72 ASTM cap sheet” to “72 pound (32.4 kg) mineral-surfaced nonperforated cap sheet ....”

The roof valley requirement was added into the 2009 IWUIC through action by the California Office of the State Fire Marshall, whose original proposal (WUIC22-06/07) was modified by the Committee to change the description from “No. 72 ASTM cap sheet” to “72 pound (32.4 kg) mineral-surfaced nonperforated cap sheet ....”

The basis for the current requirement in these sections that the D3909 underlayment be exactly 72 pound appears to have resulted from the transformation of the original proponent’s “No. 72” to “72 pound” without any technical substantiation of a need for a specific weight to satisfy the expected ember resistant function. In fact, inclusion of the “72 pound” requirement makes compliance with this provision relatively unlikely if the 72 pound requirement is interpreted literally, since it is not established as a “minimum.”

ASTM D3909 sets a minimum mass per unit area of the granule-surfaced product at 63.2 lbs/100 ft<sup>2</sup>. It further requires an average mass per roll of 68 lbs/100 ft<sup>2</sup> for products with a 2-inch selvage width, 69 lbs/100 ft<sup>2</sup> for products with no selvage, and 70 lbs/100 ft<sup>2</sup> for products with a 4-inch selvage.

This proposal (1) corrects the existing language by removing the prescription that acceptable materials be “72 pound” and, (2) replaces the inaccurate description of the materials (i.e., nonperforated cap sheet”) with a description that is based on the standard ASTM D3909 (i.e., “asphalt roll roofing”).

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## ICC23

### Improve fire classification language of IWUIC 504.2 to align with IBC and IRC. Enhance provisions to address flame and ember penetration at eave edge (combine ICC12 and ICC13).

#### BACKGROUND

ARMA proposals during cycle that generated 2024 I-codes improved language of fire classification. Address similar issues in IWUIC.

Currently, 504.2 contains a mixture of provisions for roof assembly fire classification and steps to address ember and flame penetration for raised roof coverings. Separate those issues and provide additional options for ember penetration.

**504.2 Roofs-assembly.** ~~Roofs shall be covered with a roof assembly having a have a roof assembly that complies with a Class A fire classification rating when or an approved noncombustible roof covering. Roof assemblies shall be tested in accordance with ASTM E108 or UL 790 and listed and identified as Class A by an approved testing agency. For roof assemblies where the profile allows a space between the roof covering and roof deck, the space at the eave ends shall be firestopped to preclude entry of flames or embers, or have one layer of 72 pound (32.4 kg) mineral surfaced, nonperforated cap sheet complying with ASTM D3909 installed over the combustible roof deck.~~

#### Exceptions:

1. Class A *roof assemblies* include those with coverings of brick, masonry or an exposed concrete *roof deck*.
2. Class A *roof assemblies* also include ferrous or copper shingles or sheets, metal sheets and shingles, clay or concrete roof tile or slate installed on noncombustible decks or ferrous, copper or metal sheets installed without a *roof deck* on noncombustible framing.
3. Class A *roof assemblies* include minimum 16 oz/sq. ft. (0.0416 kg/m<sup>2</sup>) copper sheets installed over combustible *roof decks*.

**504.2.2 Flame and ember entry at eaves.** ~~For roof assemblies where the profile allows a space between the roof covering and roof deck, the space at the eave ends shall resist flames or embers by one or more of the following methods:~~

1. ~~Firestopping of the space between the roof covering and the roof deck.~~
2. ~~Installation over the combustible deck parallel and adjacent to the eave, at least one course of minimum 36-inch-wide (914 mm) mineral surfaced asphalt roll roofing complying with ASTM D3909.~~



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**505.2 Roofs-assembly.** Roofs shall ~~be covered with a roof assembly having a~~ ~~have a roof assembly that complies with not less than a Class A fire classification rating when or an approved noncombustible roof covering. Roof assemblies shall be~~ tested in accordance with ASTM E108 or UL 790 ~~and listed and identified as to Class by an approved testing agency. or an approved noncombustible roof covering.~~ For roof assemblies where the profile allows a space between the roof covering and roof deck, the space at the eave ends shall be firestopped to preclude entry of flames or embers, or have one layer of cap sheet complying with ASTM D3909 installed over the combustible roof deck.

**Exceptions:**

1. Class A roof assemblies include those with coverings of brick, masonry or an exposed concrete roof deck.
2. Class A roof assemblies include ferrous or copper shingles or sheets, metal sheets and shingles, clay or concrete roof tile or slate installed on noncombustible decks or ferrous, copper or metal sheets installed without a roof deck on noncombustible framing.
3. Class A roof assemblies include minimum 16 oz/sq. ft. (0.0416 kg/m<sup>2</sup>) copper sheets installed over combustible roof decks.

**505.2.2 Flame and ember entry at eaves.** For roof assemblies where the profile allows a space between the roof covering and roof deck, the space at the eave ends shall resist entry of flames or embers by one or more of the following methods:

1. Firestopping of the space between the roof covering and the roof deck.
2. Install over the combustible deck parallel and adjacent to the eave, at least one course of minimum 36-inch wide (914 mm) mineral surfaced asphalt roll roofing complying with ASTM D3909.

**506.2 Roofs-assembly.** Roofs shall ~~be covered with a roof assembly having~~ ~~have a roof assembly that complies with not less than a Class B fire classification rating when or an approved noncombustible roof covering. Roof assemblies shall be~~ tested in accordance with ASTM E108 or UL 790 ~~and listed and identified as to Class by an approved testing agency or an approved noncombustible roof covering.~~ For roof assemblies where the profile allows a space between the roof covering and roof deck, the space at the eave ends shall be firestopped to preclude entry of flames or embers, or have one layer of cap sheet complying with ASTM D3909 installed over the combustible roof deck.

**Exceptions:**

1. Class B roof assemblies include those with coverings of brick, masonry or an exposed concrete roof deck.
2. Class B roof assemblies include ferrous or copper shingles or sheets, metal sheets and shingles, clay or concrete roof tile or slate installed on noncombustible decks or ferrous, copper or metal sheets installed without a roof deck on noncombustible framing.
3. Class B roof assemblies include minimum 16 oz/sq. ft. (0.0416 kg/m<sup>2</sup>) copper sheets installed over combustible roof decks.

**505.2.2 Flame and ember entry at eaves.** For roof assemblies where the profile allows a space between the roof covering and roof deck, the space at the eave ends shall resist entry of flames or embers by one or more of the following methods:

1. Firestopping of the space between the roof covering and the roof deck.
2. Install over the combustible deck parallel and adjacent to the eave, at least one course of minimum 36-inch wide (914 mm) mineral surfaced asphalt roll roofing complying with ASTM D3909.

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## ICC01

### Roofing Terminology. Address issues associated with “roof assembly” and “roof covering,” extending into other definitions as needed.

#### Three approaches (with progressively increasing levels of work):

- A. Resolve confusion between wood industry and roofing industry by changing the defined term “roof assembly” to “roofing assembly” and cleaning up misuses of “fire rating” and “fire classification.”
- B. Eliminate “roof covering” in all cases and replace it with “roof assembly”.
- C. Omnibus fix of terms.

### OPTION A – Change “roof assembly” to “roofing assembly.”

#### BACKGROUND

“Roof assembly” is a defined term which is technically limited to IBC Chapter 15 (roofing chapter), but is shown as a defined term outside Chapter 15. The wood industry considers a “roof assembly” to consist of the supporting structure which rests on the walls (e.g., rafters, trusses) and everything above that structure. The roofing industry considers a “roof assembly” to consist of everything above the supporting structure. This has caused confusion in the past and may cause conflict in the future.

The wood industry suggests that the roofing industry change the defined term to “roofing assembly.” Shown below are definitions of “roof” and “roofing,” which seem to indicate that the correct term for our purpose is “roofing” instead of “roof.”

#### Definitions of the noun "roof":

- Oxford English Dictionary
  - The external upper covering of a house or other building; the framing structure on top of a building supporting this. Also: a rooftop.
- Merriam-Webster Dictionary
  - The covering of a building.
  - Material used for a roof: ROOFING
- Dictionary.com
  - The external upper covering of a house or other building.
  - A frame for supporting this.
    - *An open-timbered roof.*
- Collins
  - The roof of a building is the covering on top of it that protects the people and things inside from the weather.

#### Definitions of the noun "roofing":

- Oxford English Dictionary
  - The act of covering with a roof; material used or suitable for roofs; that which forms a roof or roofs.
- Merriam-Webster Dictionary

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- Material for a roof
  - *Asphalt shingles used for roofing.*
  - *He did some roofing in the summer.*
- Dictionary.com
  - The act of covering with a roof.
  - Materials for roofs.
  - A roof.
- Collins
  - Roofing is material used for making or covering roofs.
    - *A gust of wind pried loose a section of sheet-metal roofing.*

## PROCESS

Changing “roof assembly” to “roofing assembly” appears to be a relatively straightforward process which would begin with the IWUIC and IFC in the Group A portion of the code development cycle.

Will also need to identify all misuses of “fire rating” and “fire classification” and make those cleanups at the same time. Fire rating is the term associated with tests which investigate ability for an assembly to constrain a fire (e.g., 2-hour fire rated assembly). “Fire classification” is associated with ability to prevent an external fire from passing into the building interior through the roof.

# Group B

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## ICC04

### Should there be details about fasteners used to attach drip edge flashing?

#### BACKGROUND

Member suggestion for consideration.

#### 2021 IBC:

**1507.2.8.3. Drip edge.** A drip edge shall be provided at eaves and rake edges of shingle roofs. Adjacent segments of the drip edge shall be lapped not less than 2 inches (51 mm). The vertical leg of drip edges shall be not less than 1½ inches (38 mm) in width and shall extend not less than ¼ inch (6.4 mm) below sheathing. The drip edge shall extend back on the roof not less than 2 inches (51 mm). *Underlayment* shall be installed over drip edges along eaves. Drip edges shall be installed over *underlayment* along rake edges. Drip edges shall be mechanically fastened at intervals not greater than 12 inches (305 mm) on center. Drip edge fasteners shall be roofing nails, minimum 12-gage [0.105 inch (3 mm)] shank with a minimum 3/8-inch-diameter (9.5 mm) head, complying with ASTM F1667, and of a length to penetrate through the drip edge flashing and not less than ¾ inch (19.1 mm) into the roof sheathing. Where the roof sheathing is less than ¾ inch (19.1 mm) thick, the fasteners shall penetrate through the sheathing.

**Reason.** Drip edge flashing installed both at roof eaves and rake edges are an important element of the roofing system, contributing to both proper water shedding management and to wind resistance of the roofing system in this transitional area. This proposal adds minimum requirements for fasteners used to attach drip edge flashing. These are the same minimum requirements which are prescribed for fastening asphalt shingles. Inclusion of minimum requirements will help prevent use of improper fasteners which may contribute to issues.

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## ICC07

**Align definitions of “low slope” and “steep slope” throughout the I-code family.**

### BACKGROUND

Definition of low slope is likely to change in IECC. Is the IECC version better and worth transferring into IBC?

### IECC:

**Low Slope.** A slope less than 2 units vertical in 12 units horizontal (17-percent slope) as applied to roofs.

### 2021 IBC:

**Steep Slope.** A roof slope 2 units vertical in 12 units horizontal (17-percent slope) or greater.

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## ICC08

### Modify definition of “positive roof drainage.”

#### BACKGROUND

Florida modified the definition during their most recent cycle. Intent is to remove the implication that you must add slope to be compliant. Additional slope is not always needed, but sufficient slope is always required.

**Positive Roof Drainage.** A design that accounts for deflections from all *design loads* and has sufficient ~~additional~~ slope to ensure that drainage of the roof occurs within 48 hours of precipitation.

**Reason.** The basic premise of positive drainage is that the roof drains water within 48 hours after precipitation ends. Additional slope is not always needed, but sufficient slope is always required.

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## ICC11

### Remove withdrawn ASTM standards.

#### BACKGROUND

Standards no longer in use.

D2822 – Specification for Asphalt Roof Cement, Asbestos Containing (Withdrawn 2016)

D2823 – Specification for Asphalt Roof Coatings, Asbestos Containing (Withdrawn 2014)



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## ICC09

### Remove slope-based requirement for double layer underlayment.

#### BACKGROUND

Underlayment options are now fully contained in Tables 1507.1.1(1), 1507.1.1(2), and 1507.1.1(3), making the last sentence of 1507.2.2 unnecessary.

**1507.2.2 Slope.** Asphalt shingles shall only be used on roof slopes of 2 units vertical in 12 units horizontal (17-percent slope) or greater. ~~For roof slopes from 2 units vertical in 12 units horizontal (17-percent slope) up to 4 units vertical in 12 units horizontal (33-percent slope), double *underlayment* application is required in accordance with Section 1507.2.8.~~

# 2027 ICC – ARMA Code Change Proposal Concepts

(All must be updated to 2024 I-Code)

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## ICC10

### IRC fire classification clean-up

#### BACKGROUND

Correct an error from changes put forward during the previous cycle as proposals from ARMA and Marcelo Hirschler were merged.

**R902.1 Roof assemblies.** *Roof decks* shall be covered with materials as set forth in Section R904 and ~~or~~ with roof coverings as set forth in Section R905.

# 2027 ICC – ARMA Code Change Proposal Concepts

(All must be updated to 2024 I-Code)

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## ICC06

**Is there a need for flashing provisions for mineral-surfaced roll roofing, built-up roofing, and modified bitumen roofing in IBC Chapter 15 and IRC Chapter 9?**

### BACKGROUND

Flashing sections are present for most discontinuous roof coverings, but not for continuous membranes. Is there a need for such sections? Efforts by PV industry to permit use of “sealing” as equivalent to “flashing.”

**1507.2.8 Flashings.** Flashing for asphalt shingles shall comply with this section. Flashing shall be applied in accordance with this section and the asphalt shingle manufacturer’s printed instructions.

**1507.2.8.1 Base and cap flashing.**

**1507.2.8.2 Valleys.**

**1507.2.8.3 Drip edge.**