



TECHNICAL BULLETIN

**TO: FIRESTONE CONTRACTORS
FIRESTONE DISTRIBUTORS
FIRESTONE SALES REPRESENTATIVES**

OCTOBER 2021

RE: TEMPORARY PRODUCT SUBSTITUTIONS

While the roofing and waterproofing industries continue to be challenged by global supply constraints, Firestone is committed to working with you to complete projects and satisfy customer expectations. This bulletin outlines the product substitutions Firestone will approve in the U.S., Canada, and Latin America on an individual project basis while raw material shortages continue.

For a project with a product substitution to receive a Red Shield™ Warranty, an approved Technical Deviation must be applied to the Pre-Installation Notice (PIN). PINs should be submitted at least two weeks prior to project start. Please contact your Firestone Sales Representative or Regional Technical Coordinator for assistance submitting Technical Deviation Requests. Always provide the manufacturer's Technical Information Sheet with substitution requests, as well as any other pertinent information, to help expedite approvals. Pull-out values for proposed fastener substitutions may be required depending on project specifics.

FASTENER SUBSTITUTIONS

Any FM 4470 approved roofing fastener is acceptable for use in a Firestone-warranted system provided the fastener is of an equivalent gauge, is provided by a major manufacturer of roofing fasteners (or supplied by a major roofing manufacturer under third party agreement), is listed in RoofNav, and displays the FM diamond logo on the product label or data sheet:

- A #12 fastener with an appropriate insulation plate is an acceptable substitute for a Firestone Pre-Assembled #12 and Plate, or a Firestone AccuTrac™ Fastener with AccuTrac Plate.
- A #14 fastener is an acceptable substitute for a Firestone All-Purpose (AP) Fastener. An appropriate insulation plate or seam plate is required (see below for restrictions on membrane attachment with APs).
- A #15 fastener is an acceptable substitute for a Firestone Heavy Duty (HD) fastener. An appropriate insulation plate or seam plate is required.
- Where equivalent, GenFlex fasteners and plates are acceptable substitutes for Firestone fasteners and plates.
- Other FM approved fastening systems may be acceptable substitutes for Firestone battens and RMA attachments as appropriate.
- Field-tested pull-out values may be required for all fastener substitutions.



EXPANDED POLYSTYRENE OR EXTRUDED POLYSTYRENE (E/XPS)

Use of E/XPS in projects that will receive a Firestone Red Shield Warranty is permitted when Firestone Polyiso products are not available, subject to the following restrictions:

- A thermal barrier required between E/XPS and steel decks.
- E/XPS must have a minimum thickness of 2.0".
- E/XPS must have a compressive strength of 25 PSI when it is directly beneath the membrane.
- An acceptable cover board is recommended over E/XPS, and *required*:
 - For all Adhered and InvisiWeld™ applications.¹
 - When a dark colored membrane is installed over E/XPS.
 - When E/XPS is used in Firestone PVC and PVC KEE systems.
- Fanfold insulation is not acceptable in warranted Firestone roofing systems.

NOTES:

- Deviations are subject to the Terms, Conditions, and Limitations of the Firestone warranty.
- The maximum Red Shield Warranty term for projects incorporating product substitutions of any kind is 20 years.
- The maximum warranted wind speed for projects incorporating fastener substitutions is 72 MPH.
- Enhancements to insulation pre-securement are not required unless an air or vapor barrier is used, or a tested assembly calls for an increase. See tested assembly or FM Approvals Loss Prevention Data Sheet 1-29, section 2.2.10, Table 6.
- Performance validation may not be available when non-Firestone products are used. When performance validation is required by Specification, by building code, or for insurance purposes, product substitutions will not be accepted for warranted projects.
- Buildings with large openings and partially enclosed or open buildings may require system enhancements.
- Buildings in high wind, coastal, and special wind zones are not eligible for product substitutions.

¹ At this time, E/XPS with factory-applied fiberglass facers require a cover board for Adhered and InvisiWeld applications.



Please also be aware of the following:

Firestone Pre-Assembled #12 fasteners and insulation plates and AccuTrac AP Fasteners with AccuTrac Plates are approved for insulation attachment in Mechanically Attached and Adhered systems up to a 20 Year Red Shield Warranty. *No deviation is required.* A Technical Deviation is required when using an equivalent #12 fastener and plate as described above.

Firestone AP Fasteners with appropriate plates are approved for insulation and membrane attachment into wood decks in conventional Mechanically Attached Systems (MAS) and Adhered systems up to a 30 Year Red Shield Warranty. *No deviation is required.* A Technical Deviation is required when using an equivalent #14 fastener and plate as described above. Note: *Firestone APs and equivalent #14 fasteners are **never** acceptable for InvisiWeld applications regardless of deck type or warranty term.*

Firestone AP Fasteners (and equivalent #14s) are not acceptable for membrane attachment into steel decks, either in conventional MAS or InvisiWeld applications.

The substitutions outlined above are the most frequently requested amid current supply constraints. Firestone remains open to other substitutions on a case-by-case basis. Requests should be submitted via the Technical Deviation Request Form. Firestone will assess the need for continued substitution approvals in March 2022.

Please contact your Firestone Regional Technical Coordinator at 800-428-4511 with requests for additional information.

Sincerely,

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