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HardieSoffit[®] Panel Fire-Resistance Rated Assemblies





JAMES HARDIE® HARDIESOFFIT® PANEL FIRE ASSEMBLIES

James Hardie[®] fiber cement products, including HardieSoffit[®] panel are non-combustible when tested in accordance with ASTM E136, Additionally, it has a flame-spread index of 0 and a smoke developed index of 5 when tested in accordance with ASTM E84. This is specifically stated for HardieSoffit panel in ESR-2273.

https://www.jameshardiepros.com/getattachment/0c6843bb-c402-4f68-81c5-27c39f9003ec/ESR-2273.pdf

Rule #2 of the T.Z. Harmathy's Ten Rules of Fire Endurance states: "fire endurance of a construction does not decrease with the addition of further layers"*. Since HardieSoffit panels are not combustible they will not decrease the fire endurance when added as a layer of a fire rated assembly.

Any fire rated assembly or modification to a fire assembly incorporating HardieSoffit panels must be reviewed and approved by the your projects design professional or engineer.

* Fire Endurance May 1965 (35) "Ten Rules of Fire Endurance Ratings".

Recommended 1-hour Assembly

HardieSoffit panel requires an underlying fire rated assembly to achieve a requisite fire rating. To achieve a 1-hour fire rating. HardieSoffit panels may be attached to the gypsum base layer in this assembly:

ROOF-CEILING SYSTEMS	GA FILE NO. RC 2602	GENERIC	I 1 HOUR FIRE

Wood Trusses, Gypsum Wallboard

Base layer 5/8in type X gypsum wallboard applied at right angles to wood trusses 24in o.c. with 1 1/4in Type W or S drywall screws 24in o.c. Face layer 5/8in type X gypsum wallboard or gypsum veneer base applied at right angles to trusses with 1 7/8in Type W or S drywall screws 12in o.c. at joints and intermediate trusses and 1 1/2in Type G drywall screws 12in o.c. placed 2in back on either side of end joints. Joints offset 24in from base layer joints. Wood trusses supporting 1/2in wood structural panels applied at right angles to trusses with 8d nails. Appropriate roof covering.



Approx. Ceiling Weight: 5psf Fire Test: FM FC 172, 2-25-72; ITS, 8-6-98

NOTE: Install HardieSoffit Panel in accordance with published installation instructions.

- HZ5: http://www.jameshardie.com/d2w/installation/hardiesoffit-hz5-us-en.pdf
- HZ10: http://www.jameshardie.com/d2w/installation/hardiesoffit-hz10-us-en.pdf

Source: Gypsum Association Fire Resistance Design Manual GA-600-2012, p.191

Additional Resources

If the recommended assembly does not meet the needs of your project, we recommend the following resources:

- Gypsum Association contact information: 301.277.8686 | info@gypsum.org
- Gypsum Association Fire Resistance Design Manual: http://www.gypsum.org/wp/wp-content/uploads/2011/11/GA-600-12-web-version-1.html

James Hardie Building Products Inc www.jhinsite.com

 UL's ULtimate Fire Wizard: http://database.ul.com/cgi-bin/ulweb/LISEXT/1FRAME/FireResistanceWizard.html

Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C.
Standard Test Method for Surface Burning Characteristics of Building Materials

The JH Insite Team

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Additional Installation Information, Warranties, and Safety Information are available at JamesHardie.com

1 866 442 7343 | www.jameshardie.com

IMPORTANT: Failure to install and/or finish this product in accordance with applicable building codes and James Hardie written application instructions may affect system performance, violate local building codes, void the product-only warranty and lead to personal injury.

DESIGN ADVICE: Any information or assistance provided by James Hardie in relation to specific projects must be approved by the relevant specialists engaged for the project (eg. builder, architect or engineer). James Hardie will not be responsible in connection with any such information or assistance.

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