

BUILDING PRODUCTS LISTING PROGRAM

Customer: Kreysler & Associates
Class: Composite Wall Panels
Location: 501 Green Island Rd., American Canyon, CA 94503
Website: www.kreysler.com

Listing No. B1033-1
Report No. B1033-1, Edition 7

Effective Date: August 30, 2011
Last Revised Date: May 23, 2023
Expires: <N/A>

Standards: ASTM E84 *Standard Test Method for Surface Burning Characteristics of Building Materials.*
NFPA 285 *Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load Bearing Wall Assemblies Containing Combustible Components.*
NFPA 259 *Standard Test Method for Potential Heat of Building Materials.*
NFPA 268 *Standard Test Method for Determining Ignitability of Exterior Wall Assemblies Using a Radiant Heat Energy Source.*
NFPA 286 *Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth.*
ASTM E108 *Standard Test Methods for Fire Tests of Roof Coverings.*

Product: Kreysler & Associates Fire-resistant Composite Panels for Interior and Exterior Architectural Applications.

Markings: Products are marked in a permanent manner where it is readily visible after installation with the following:

- a) Company Name
- b) Product Name
- c) Month and year of manufacture
- d) QAI Logo with "us" identifier
- e) QAI file Number: B1033-1
- f) ASTM E84: Class A (Where applicable)
- g) NFPA 285 (For KreyslerFire 285 and B13 product only)
- h) NFPA 286 (For KreyslerFire 286 product only)
- i) NFPA 268 (For KreyslerFire 285 and B13 products only)
- j) QAI logo shown here:



Models / Ratings: Kreysler & Associates products evaluated were found to have the following performance(s).

Kreysler & Associates Fire-Resistant Composite Panels have surface burning characteristics when evaluated to ASTM E84:

Product Name	Flame Spread Index (FSI)	Smoke Developed Index (SDI)	Ratings	Thickness Range (inches)
KreyslerFire 285	< 25	< 450	Class A	1/8 – 3/8
KreyslerFire A2	< 25	< 450	Class A	1/4 - 3/4
KreyslerFire B1	< 25	< 450	Class A	1/4 - 3/4
KreyslerFire B11	< 25	< 450	Class A	1/4 - 3/4
KreyslerFire B12	< 25	< 450	Class A	1/4 - 2
KreyslerFire B13	< 25	< 450	Class A	3/8 – 3/4
KreyslerFire B14	< 25	< 450	Class A	1/8 – 2.5
KreyslerFire B16	< 25	< 450	Class A	1/8 – 3
KreyslerFire B17	< 25	< 450	Class A	3/16 - 3/8
KreyslerFire B18	< 25	< 450	Class A	3/16 - 3/8
KreyslerFire B19	< 25	< 450	Class A	3/16 - 3/8
KreyslerFire B20	< 25	< 450	Class A	3/16 - 3/8

Kreysler & Associates NFPA 285 Compliant Exterior Wall Assemblies for use in Types I-IV Construction:

KreyslerFire 285 Assembly		
Item	Component	Description
1	Interior Finish	Minimum 5/8-inch Type X gypsum wallboard complying with ASTM C1396 and listed by an approved agency. Gypsum joints to be finished with 2-in. tape and treated with joint compound compliant to ASTM C475. Wallboard is to be fastened to studs in accordance with the applicable code.
2	Studs	Minimum 20-ga, 3-5/8-inch depth C-channel steel studs spaced at a maximum of 16" on center (OC).
3	Cavity Insulation (Optional)	Any thickness mineral wool may be used in the wall cavity or unfaced fiberglass batt.
4	Fire Blocking	Minimum 4-inch mineral wool of 4 lbs/ft ³ density fire safing.
5	Exterior Sheathing (Optional)	Minimum 5/8-inch Type X exterior gypsum wallboard complying with ASTM C1177 and listed by an approved agency. Sheathing is to be applied horizontally and fastened with 1 1/4-inch length #6 Type S screws spaced at 8 inches OC around the perimeter and 12 inches OC in the field. Joints of the exterior gypsum are to be staggered from the interior gypsum.
5	Cladding Support Structure	Aluminum extrusion, sized to meet the anticipated service loads, with 1/4-inch thickness aluminum blades for connection to the exterior cladding vertical mullions. The aluminum extrusion is secured to the underlying steel studs (item 2) per Engineering Design. The anchorage design is to be reviewed and approved by the authority having jurisdiction.
7	Exterior Cladding	KreyslerFire 285 fire resistant composite panels composed of a steel / aluminum substructure encapsulating 5-inches of mineral wool batt insulation. Aluminum horizontal and vertical mullions of minimum 5-



		inches depth are installed as the Kreysler panel perimeter, with additional horizontal mullions installed where additional stiffness is required per the Engineering Design. The interior (wall) surface of the aluminum mullions is clad with a galvanized steel back pan of minimum 1/8-inch thickness. The surface (outboard) surface of the aluminum mullions is clad with an aluminum back pan of 1/8-inch thickness. The back pans encapsulate 5-inches thick mineral wool insulation. KreyslerFire 285 panels of 0.18-inch thickness was mechanically secured through ¼” thickness aluminum blades that connected the inner returns of the KreyslerFire 285 panels back to the aluminum mullion support structure.
	Window Treatment	20-ga galvanized steel flashing on the jambs, sill and header of the window opening.

KreyslerFire – B13 Assembly		
No.	Component	Description
1	Interior Wallboard	Minimum 5/8-inch Type X gypsum wallboard complying with ASTM C1396 and listed by an approved agency. Gypsum joints to be finished with 2-inch tape and treated with joint compound compliant to ASTM C475. Wallboard is to be fastened to studs in accordance with the applicable code.
2	Studs	Minimum 16-ga, 6-inch C-channel steel studs spaced at a maximum of 16-inches OC.
3	Insulation	6-inches thickness mineral wool batt insulation complying with ASTM C665.
4	Fire Blocking	Minimum 4-inch mineral wool of 4 lbs/ft ³ density fire safing.
5	Exterior Sheathing	Minimum 5/8-inch Type X exterior gypsum wallboard complying with ASTM C1177 and listed by an approved agency. Sheathing is to be applied horizontally and fastened with 1-5/8-inch length #6 Type S screws spaced at 16-inches OC around the perimeter and 24-inches OC in the field. Joints of the exterior gypsum are to be staggered from the interior gypsum.
6	Water Resistive Barrier (WRB)	Dow Chemical Defendair 200, spray applied at manufacturer’s recommended thickness continuously over exterior sheathing.
7	Cladding Support Structure	Steel plates of 14-inches x 16-inches x ½-inch thickness anchored to the underlying steel stud structure with four ¼-inch bolts.
8	Water Resistive Barrier (WRB)	Dow Chemical Defendair 200, spray applied at manufacturer’s recommended thickness continuously over exterior sheathing.
9	Continuous Exterior Insulation (Optional)	Maximum 2-inches thickness DuPoint™ Thermax™ Xarmor™ (ci) polyisocyanurate foam plastic insulation, ASTM C1289 Type I Class 2 compliant listed by an approved agency. Continuous insulation is fastened with #6 2-1/4-inch length Type S drwyall screws with washers spaced at 16-inches around perimeter and 24-inches in the field. Continuous insulation joints are treated with Dow Liquidarmor™ - CM flashing and sealant.
7	Exterior Cladding	KreyslerFire B13 fire resistant composite panels with a nominal thickness of 0.18-inches mechanically secured to steel framing members. The steel framing is mechanically secured to the underlying steel plates (item 7) per Engineering Design. Cladding anchorage to be reviewed and approved by the authority having jurisdiction.
8	Window Treatment	3-inch x 6-inch x 1/8-inch steel angle flashing is installed around the jambs, header and sill. The steel angle is to be coated with Carbonline

		Carbocrylic 3359 primer, and Carboline A/D Firefilm III intumescent paint, with the paint and primer to be fully cured in accordance with the manufacturer’s published installation instructions prior to installation. 3M intumescent tape is installed between the steel flashing and Kreysler B13 exterior cladding at time of installation. Excessive gaps or voids not covered by flashing are to be friction fit with mineral wool fire safing.
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Kreysler & Associates NFPA 259 Results:

Product	Potential Heat of Combustion (Btu/lb)
KreyslerFire 285	3,324
KreyslerFire B13	3,357

Kreysler & Associates NFPA 268 Results:

Product	NFPA 268 Results
KreyslerFire B13	Complies
KreyslerFire 285	Complies

The above KreyslerFire panels have been evaluated and found compliant with 2021 International Building Code (IBC) Section 1406.2.1.1.

Kreysler & Associates NFPA 286 Results:

Product	NFPA 286 Results
KreyslerFire 286	Complies

The above KreyslerFire 286 panel has been evaluated and found compliant with the 2021 IBC Section 2613.3 the 2021 IBC Section 803.1.1.

Kreysler & Associates Roof-Fire Classified Assemblies ASTM E108 Results:

Assembly 1: Kreslyer Fire Class A Assemblies: Unlimited Slope

PRODUCTS	ASSEMBLY DESCRIPTION
KreylserFire 285 KreyslerFire B13	KreyslerFire exterior roof coverings described for direct to trusses attachment. Trusses are to be metal type. KreyslerFire roof coverings require mechanical fastening to underlying framing members. KreyslerFire products are approved for installation without underlying sheathing. Where underlying sheathing is required, non-combustible sheathing can be included without changing roof-fire classification.

Notes: The product was tested in a flat configuration.

The installation of products outlined in this listing must comply with local building codes and is subject to inspection by the authority having jurisdiction.

The ASTM E84, NFPA 285, NFPA 259, NFPA 268 and NFPA 286 standards do not address all possible end use concerns. It is the responsibility of the end user of the product to determine the suitability of the product for the intended application.

Listed manufacturers are subject to on-going inspections by QAI to ensure that the products outlined above remains as it is listed.

The materials, products or systems listed herein have been qualified to bear the QAI Listing Mark under the conditions stated with each Listing. Only those products bearing the QAI Listing Mark are considered to be listed by QAI. No warranty is expressed or implied, and no guarantee is provided that any jurisdictional authority will accept the Listing found herein. The appropriate authorities should be contacted regarding the acceptability of any given Listing. Visit the QAI Online Listing Directory located at www.qai.org for the most up to date version of this Listing and to validate that this QAI Listing is active. Questions regarding this listing may be directed to info@qai.org. Please include the listing number in the request.
