

BUILDING PRODUCTS LISTING PROGRAM

Customer: Ectek Building Material Inc.
Class: Cementitious Backing Boards
Location: Concord, ON Canada
Website: ectekbm.com

Listing No. B1127-1
Project No. B1127-1, Edition 1
Effective Date: September 14, 2021
Last Revised N/A
Date:
Expires: N/A

Standards: ASTM E136 *Standard Test Method for Assessing Combustibility of Materials Using a Vertical Tube Furnace at 750°C*
ASTM E330/330M *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.*
ASTM E455 *Standard Test Method for Static Load Testing of Framed Floor or Roof Diaphragm Constructions for Buildings.*

Product: Megaboard magnesium oxide board.

Markings: Product is marked with labels that include the following information:
a) Manufacturer's name.
b) Product name.
c) ASTM E136 – Classified Non-Combustible
d) Traceability code.
e) QAI logo shown here:



Labels are applied to palletized finished products to ensure visibility on the jobsite.

Ratings: **The following outlines Ectek Megaboard results determined through testing to the noted standards:**

Ectek Megaboard magnesium oxide boards are classified as non-combustible per ASTM E136.

Assemblies, when constructed with Megaboard as detailed provide pressure resistances determined in accordance with ASTM E330/330M as noted:

MINIMUM MEGABOARD THICKNESS	MINIMUM STUD SIZE	MAXIMUM STUD SPACING	MAXIMUM CROSS BRIDGING SPACING	FASTENER MINIMUM	DEFLECTION MAXIMUM	ULTIMATE CAPACITY ¹
¾" 19 mm	2" x 6" 51 mm x 152 mm	24" 610 mm	24" 610 mm	#8 2" (51 mm) length wood screws spaced at 9" (230 mm) on center along studs and cross bridging.	< 0.044" @ 100 psf < 1.1 mm @ 4.8 kPa	> 330 psf > 15.8 kPa

Note 1: Pressure capacity is for positive direction only. Negative direction loading including allowable fastener capacities are outside the scope of this listing.

Note 2: Fasteners noted were not evaluated for additional performance requirements including compatibility outside the pressure resistance. Please see Ectek recommended fastener types for products compatible for use with Megaboard.

Assemblies, when constructed with Megaboard as detailed, provide shear diaphragm resistances determined per ASTM E455 as noted^{1,2}:

MINIMUM MEGABOARD SUBFLOOR	JOIST MINIMUM	RIM JOIST MINIMUM	BRIDGING MINIMUM	STRAPPING	MAXIMUM ASPECT RATIO	ULTIMATE CAPACITY	SHEAR MODULUS G'
¾" 19 mm	Steel C-channel of minimum 50 ksi (345 MPa) yield strength 16 Ga. (1.3 mm) 10" depth with 2" leg (254 mm x 51 mm) Spaced at 24" (610 mm) on center spacing. Subfloor fastened to joists with #10-24 x 1-5/8" (41 mm) Grabber Construction 101716W3RG wafer head ceramic coated self-drilling screws at 6" (152 mm) around perimeter and 12" (304 mm) in the field. Joints staggered at 48" (1219 mm) installed ½" (13 mm) from panel edges..	16 Ga. (1.3 mm) 10" x 2" (254 mm x 51 mm) fastened to joists with one #10-16 x ¾" (19 mm) length self-drilling screws at each joist flange.	16 Gauge (1.3 mm) 9" x 2" (229 mm x 51 mm) Located 48" (1219 mm) from rim joist in each outside joist cavity. Fastened to joist with one #8-16 x ½" (13 mm) self-drilling screw at top and bottom of bridging each side.	20 Ga. (0.9 mm) 1-1/4" (32 mm) flat bar. Fastened to joists with one #8-16 x ½" (13 mm) self-drilling screw at each joist.	1:2	742 lbs/ft 10.8 kN/m	6,493 lbs/in 1.14 kN/mm
¾" 19 mm	Southern Yellow Pine Grade 1 lumber of 2" x 8" (51 mm x 203 mm) S.G. > 0.51 ¹ Spaced at 24" (610 mm) on center spacing. Subfloor fastened	2" x 8" 51 mm x 203 mm S.G. > 0.51 ¹ Fastened to joists with five 16d 3" (76 mm) common nails at each	2" x 8" 51 mm x 203 mm S.G. > 0.51 ¹ Spaced at 48" (1219 mm) on center. Fastened to joists with three 16d 3" (76 mm) common	N/A	2:1	2,075 lbs/ft 30.2 kN/m	N/A

	to joists with 8d x 2-3/8" (60 mm) length ring shank roofing nails 6" (152 mm) around the perimeter and 12" (305 mm) in the field ² . Joints staggered at 48" (1219 mm) installed 1/2" (13 mm) from panel edges.	joist end.	nails at each bridging end.				
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Note 1: Connection of the rim joist to shear resisting wall structure is outside the scope of this listing and is to be designed by the registered design professional.
 Note 2: Fasteners noted were not evaluated for additional performance requirements or compatibility outside the diaphragm shear resistance. Please see Ectek recommended fastener types for products compatible for use with Megaboard.

Notes: Final acceptance of the product in the intended application is to be determined by the authority having jurisdiction.

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