



M4-SUBFLOOR PANEL – SILICA FREE

Non-combustible – 20% lighter than Cement Panel - Structural

INSTALLATION

Installation with UL or FM Classified Subfloor covering..

LOAD

M4 Subfloor can carry a total ultimate load of 1700 lbs if spaced 24” o.c and installed according to MPC specifications. The ultimate load has no safety factor included and a qualified engineer must approve calculations.

PROPERTIES

- Non combustible
- 20% lighter than cement boards
- Tile can be applied directly
- Install like wood sheathing, circular saw for cutting
- Fastening: screws, nails or staples
- No Silica vs cement boards which contain silica
- Structural
- Will not buckle or warp like wood sheathing
- Option T & G or shiplap

RESISTANT TO ROT, TERMITE, MOLD AND FUNGUS

The M4-Subfloor will not rot or degrade in humid environments. The PH value makes the panel very resistant to attack by termites, fungus and mold.

MATERIAL

The M4-Subfloor is produced with composite materials, contain no chloride and strong alkali free glass fibre mesh. It is a 100% asbestos and silica free. The board appears in its natural off- white colour as standard and has a hard and durable surface.

APPLICATIONS

Subfloor applications requiring fire rating and non- fire rating as well as termite, mold and mildew control.

Technical specifications

- **M4-Subfloor Panel**
100% Silica and asbestos free



Dimension

Length standard	Feet	8' and 10'
Width standard/max	Feet	4'
Thickness standard	Inches	3/4"
Colors standard		Off white
Glass fiber	Non alkali fiber glass mesh	6 layers
Weight per board	ASTM C 1185-02	143 lbs
Tolerance Thickness	ASTM C 1186-02	+/- 0.5%
Tolerance Length	ASTM C 1186-02	+/- 0.5%
Tolerance Width	ASTM C 1186-02	+/- 0.5%

Fire Properties

Fire class material	ASTM E 84	Flame spread - index 10 or less
Fire class material	ASTM E 84	Smoke- index 0
Fire class material	ASTM E 136	Non combustible
Load Rated Construction	ASTM E 119-15/CAN/ULC S101-07	1 hour on 2" x 4" wood studs

Mold Resistance

90 F +/- 2 RH 95-98% exposed for 720 Hours

	ASTM D3273-12, scale 1-10 and 10 best	10
--	---------------------------------------	----

Flexural Strength Modulus of Elasticity

Wet	ASTM C 1185-99	1059 psi
Dry	ASTM C 1185-99	1150 psi

Hygroscopic Properties

Absorption of humidity from air	72F – 94% RH exposed for 720 Hours	<28%
Expansion from dry to wet	ASTM D 1037-99	< 0.15 %
Moisture content by delivery	ASTM 1185-99	< 20 %

Chloride Content

Content of Chloride	EN 14582: 2007	< 1 %
---------------------	----------------	-------

Thermal Properties

R value	m ² xK/W	0.104
---------	---------------------	-------

Shear Bond Strength

Dry set Portland cement	ANSI A118.1-99	54.8 psi
Latex-Portland Cement Mortar	ANSI A118.4-99	108.9 psi

Bending Strength 5/8"

Bending strength	ASTM D 1037-99	14 MPa (>216 psi)
------------------	----------------	-------------------

Fasteners Pull Through

3/4" M4	ASTM D 1037-99	301 lbs
---------	----------------	---------

Racking Shear Resistance for 1/2" thickness according ASTM E72-14a and limiting factor of drift 0.200"

10D common Nails with 16" in. o.c on 2" x 4 in joint 4"x 4"	Ultimate load	13180 lbs
10D common Nails with 16" in. o.c on 2" x 4 in joint 4"x 4"	Safety factor 3/drift 0.200"	190 lbs/ft
Staple 0.5 crown with 16 in. o.c on 2" x 4 " lumber	Ultimate Load	5738 lbs
Staple 0.5 crown with 16 in. o.c on 2" x 4 " lumber	Safety factor 3/drift 0.200"	190 lbs/ft
S-12 Rock on with 16 in. o.c on 1 5/8" x 3.5" 18 Gauge	Ultimate Load	10030 lbs
S-12 Rock on with 16 in. o.c on 1 5/8" x 3.5" 18 Gauge	Safety factor 3/drift 0,200"	243 lbs/ft



Humidity Deflection	ASTM C 1396-02	< 1/16"
Compression Indentation	ASTM D2394-83	0.01" (1/4") – 0.02" (5/8")
Falling Ball Impact	ASTM D1037-99	Pass
Freeze Thaw Resistance	ASTM C666-97	Pass