



HOME of MAGNUM BOARD®

"The New Generation **GREEN** Building Material"

"Install It for Health-Install It for Life"

Manufacturing Sheathing & Siding Products

ENGINEERING SPECIFICATIONS

SPECIFICATGION NO.:	011118.1225
DESCRIPTION:	Magnum Roofing and Flooring Substrate – 18MM SB
ISSUE NO.:	07
ORIGINAL ISSUE DATE:	December 12, 2018
REVISION ISSUE DATE:	June 16, 2022
BRIEF MODIFICAITON INFO:	Corrected lb to read 2440 from 1220 and modified fiber descriptions.

I. Widths:

- a. 4' (1220mm)

II. Lengths:

- b. 8'-(2440mm)
- c. 9'-(2743mm)
- d. 10'-(3048mm)
- e. 12'-(3658mm)

III. Color:

- a. White to cream

IV. Edge Profiles

- a. Square edge - standard
- b. Ship Lap
- c. Tongue and groove
- d. Tape Relief

e. Bevel Edge

V. Product Uses Include, but Are Not Limited To:

- a. Roofing Substrate
- b. Flooring Substrate
- c. Interior Sheathing
- d. Exterior Sheathing
- e. Ceilings
- f. Shear Walls

VI. Fasten To:

- a. Light gauge (preferably GAL 90. Refer to MBP Install Guides)
- b. LVL
- c. Dimensional Lumber strictly in accordance with MBP install guides

VII. Engineering Chart

a. Summary Strength Data

Line No.	Test Description	Unit	Criteria	Result	Conclusion
1	Density	Kg/m ³	1.10 / 1.20	1.18	✓
2	Thickness	mm / inches	18mm +/- 0.2mm	17.93mm	✓
3	Water Content-(%)	%	≤ 8%	5.9%	✓
4	Dry Shrinkage-(%)	%	≤ 0.3%	0.23%	✓
5	Swelling Ratio-(%)	%	≤ 0.6%	0.39%	✓
6	Screw Holding Capability	n/mm	≥ 50	68	✓
7	Chlorine Ion Content-(%)	%	≤ 3%	2.43%	✓ Industry Standard is 10 % Maximum
8	Flexural Strength	Mpa	≥12	16.0 to 17.0	✓
9	Impact Strength	Kj/m ²	2.0	3.1	✓
10	Combustibility Rating		Class A1	Class A1	✓

b. Span Chart – 24" Centers:

See exhibit A attached hereto. New testing in process.

For engineering purposes in the interim, a 100mm wide X 150mm long X 18mm thick sample tests between 16 Mpa and 17Mpa. Extrapolated to 24-inch centers, pounds force per square inch = approximately 616.25 lbs/ft². Typical requirement is between 100 to 200 lbs/in². Magnum roofing and flooring substrate far exceeds typical requirements in industrial applications.

LEGEND

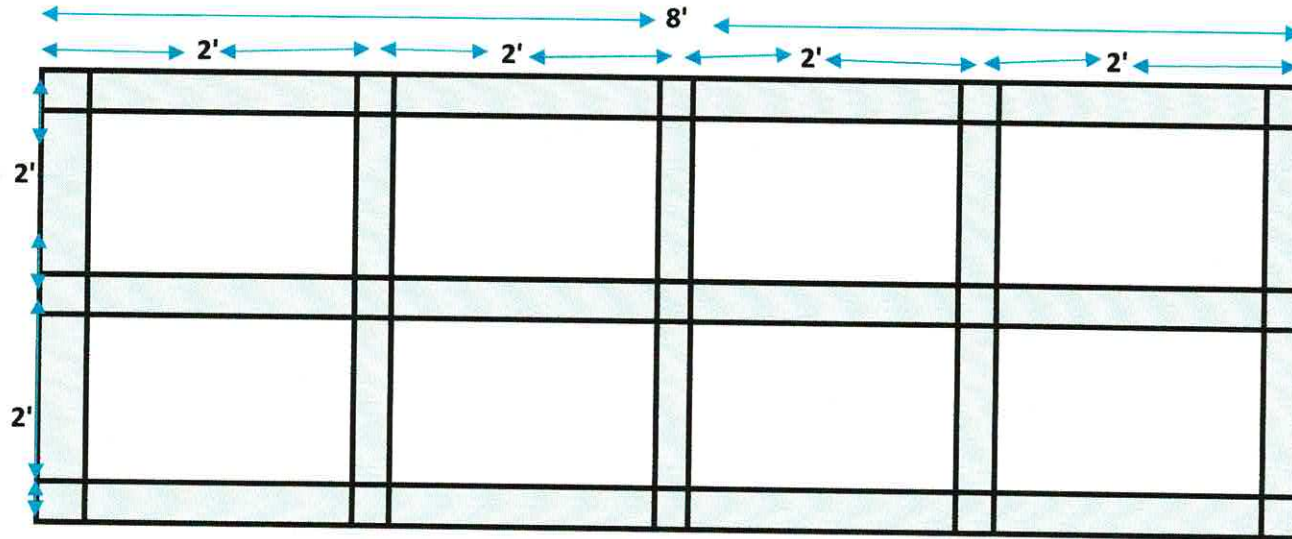
- ✓ = Meets or exceeds Magnum Board Products, LLC minimum standards.
- ✓ All Magnum Board standards meet or exceed ASTM standards.

NOTES:

1. For additional test and engineering information, refer to MBP Certified Test Summary.
2. Reference MBP Installation Instructions
3. Reference MBP Technical Guide
4. Special order lengths and widths are available upon request
5. Impact strength is measured using test protocol ASTM-D5420

EXHIBIT A

MAGNUM ROOFING AND FLOORING SPAN CHART



FASTENING PROFILE

- ≥ 4" from corners
- 9/16" from roofing and flooring edges
- 12" apart along perimeter edges and joist lines.

ALLOWABLE FORCE

600 lbs / ²Ft