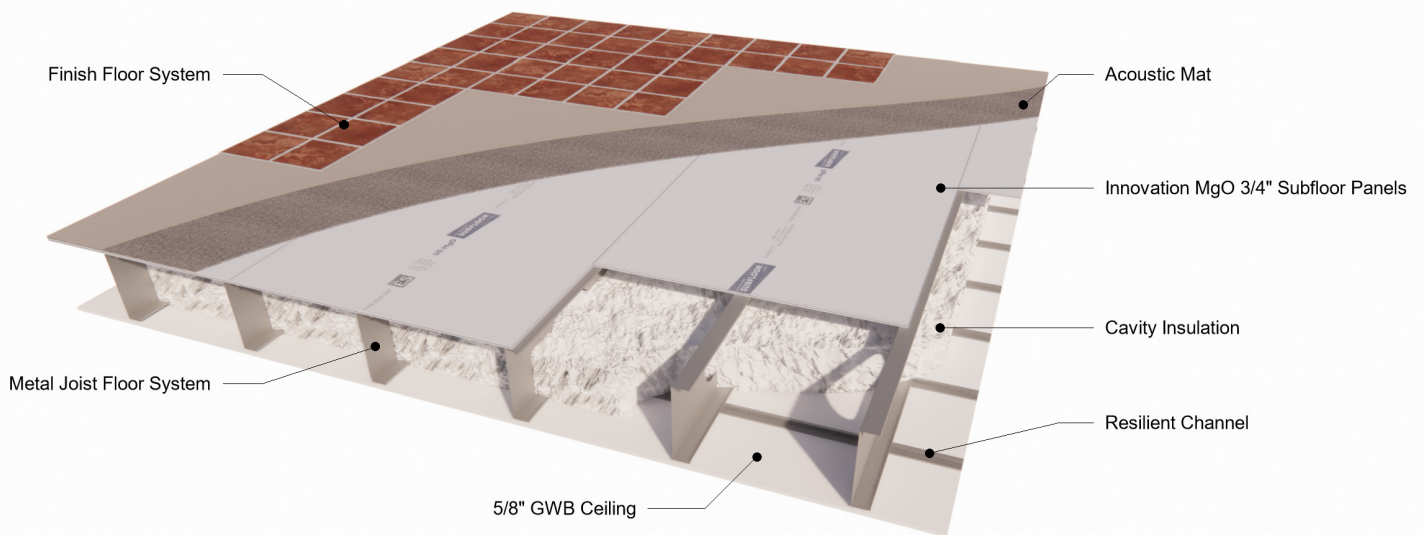


3/4" SUBFLOOR PANELS

Innovation MgO 3/4" Subfloor Panels provide structural support and fire resistance in 3/4" panels for subfloor use in commercial and multifamily buildings. Unlike fire-retardant-treated wood (FRTW) sheets, Innovation MgO Subfloor Panels will char, not burn, and maintain their structural integrity when exposed to fire.

Panels may be used for both fire resistance and structural strength on their own in subfloor and underlayment applications, unlike wood and gypsum-based products that require multiple layers and added thickness to achieve the same results.

In a fire event, panels absorb large amounts of heat, contributing to a delay in fire and smoke spread. Innovation MgO 3/4" Subfloor Panels provide occupants and emergency personnel with additional time to evacuate and perform life-saving rescues in the event of a fire event.



3/4" SUBFLOOR PANELS

Physical Properties			
Material Composition	Magnesium Oxychloride (MOC) Cement	Thickness	Nominal 3/4" (19mm)
Weight (lbs/sf)	±155 lbs (4.8)	Thickness Deviation (ASTM C1185)	< ± 1/16 in. (1.6mm)
Available Sizes	Nominal 48 in. (1220mm) x 96 in. (2440mm) x 3/4 in. (19mm)	Length, Width, and Diagonal Deviation (ASTM C1185)	< ± 1/8 in. (3.2mm)
Density	≥ 1.09 g/cm ³	Unprotected Exposure	180 days
Test Name	Test Method	Results	More Info / Minimum AC
Code Acceptance			
Building Types	2018 and 2021 IBC and IRC; 2023 FBC; 2022 CBC and CRC; 2023 LABC and LARC	All Building Types (I, II, III, IV, V)	ESR-5418 (PENDING)
Code Evaluations	ASTM E84: Surface Burning Characteristics of Building Materials ASTM E119: Fire Tests of Building Construction and Materials ASTM E2768: Extended Duration Surface Burning Characteristics of Building Materials AC 386: Acceptance Criteria for Fiber-Reinforced Magnesium Oxide-Based Sheets		ESL-1596 (PENDING) ESL-1610 (PENDING) ESL-1632 (PENDING) ESR-5418 (PENDING)
Fire & Thermal Resistance Properties			
Flame and Smoke Development	ASTM E84, ASTM E2768	PENDING	ESL-1596 (PENDING)
Combustibility	ASTM E136-19 Method A	PENDING	ESR-5418 (PENDING)
Fire-Rated Floor Assemblies	ASTM E119 CAN/ULC-S101	PENDING PENDING	PENDING
Structural Properties			
Allowable Stud Spacing	-	PENDING Estimated 12 in / 16 in / 19.2 in / 24 in	-
Board Capacity (lbs/sf)	-	PENDING	
Compression Indentation	ASTM D2394	0.004 in.	Deformation at 1250 psi / Requirement to be less than 0.05 in.
Flexural Strength (Machine / Cross Direction)	ASTM C1185	Dry: 2,855 MD / 3,410 XD Wet: 2,980 MD / 3,049 XD	580 psi (4000 kPa) min average acceptance for both wet and dry
Humidified Deflection	ASTM C473	1/8 in.	48 hours at 90F and 90% RH / Required to be less than 1.25 in.
Falling Ball Impact	ASTM D1037	No damage to top or bottom from a 12" drop	-
Uniform Static Air Pressure	TAS 202-94	PENDING	-
Cyclic Air Pressure	TAS 203-94	PENDING	-
Fastener & Adhesion Properties			
Dry-Set Cement Shear Bond Strength	ANSI A118.1/A118.4	86 psi	Min shear bond strength at 7-day curing of 50 psi
Latex Cement Shear Bond Strength	ANSI A118.1/A118.4	307 psi	Min shear bond strength at 7-day curing of 50 psi
Fastener Withdrawal	ASTM D1037	> 350 lbs. (max force)	#10-13 Pancake Head Screw
Nail Head Pull-Through	ASTM D1037	> 618 lbf	0.121 x 3" Roofing Nail - Resistance of 90 lbf
Moisture Properties			
Moisture Absorption	ASTM C1185	≤ 20%	48 Hour Submersion
Moisture Content	ASTM D4442	≤ 6.4%	-
Water Vapor Permeability	ASTM E96 Water Method	11.5 perms	-
Moisture Movement Test	ASTM C1185	0.06% Machine Direction 0.11% Cross Direction	Increase of chamber from 30% Relative Humidity to 90% measured in both machine and cross direction