
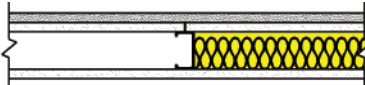
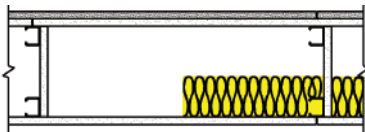
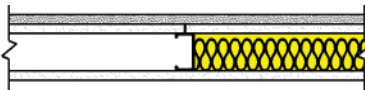
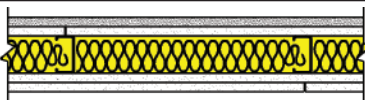
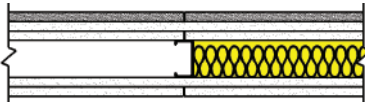
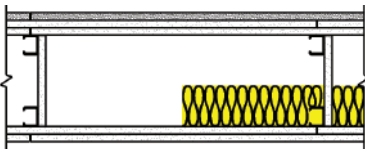
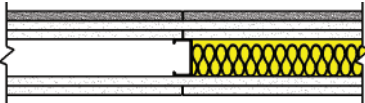
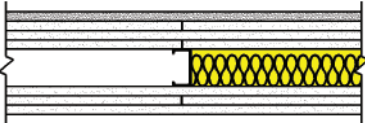


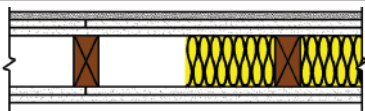
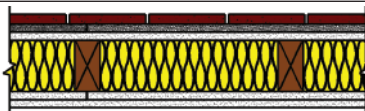


Fire-Rated Assemblies

UL LISTED PERMABASE® CEMENT BOARD PARTITIONS – STEEL FRAMING		
Fire Rating	UL Design No.	Description
1 hr.	V452	 1/2" PermaBase applied vertically or horizontally to one side of 3-5/8" steel studs 16" o.c. 5/8" Fire-Shield Gypsum Board applied vertically to opposite side. 3" mineral wool insulation in stud cavities.
1 hr.	V438	 1/2" PermaBase applied vertically or horizontally over 5/8" Fire-Shield Gypsum Board applied vertically to each side of 3-5/8" steel studs 16" o.c. PermaBase secured to studs with cement board screws of adequate length to penetrate studs 3/8" spaced 8" o.c.
1 hr.	U420	 1/2" PermaBase applied vertically or horizontally over 5/8" Fire-Shield Gypsum Board applied vertically to each side double row of 1-5/8" steel studs 16" o.c. spaced 6" apart. PermaBase secured to studs with cement board screws of adequate length to penetrate studs 3/8" spaced 8" o.c.
1 hr. Load Bearing	U425	 1/2" PermaBase applied vertically or horizontally over 5/8" Fire-Shield Gypsum Board applied vertically to each side of 3-1/2", 20 gage steel studs 16" o.c. PermaBase secured to studs with cement board screws of adequate length to penetrate studs 3/8" spaced 8" o.c.
2 hr.	V452	 1/2" PermaBase applied vertically over 1/2" Fire-Shield C Gypsum Board, applied vertically to one side of 3-5/8" steel studs 16" o.c. 2 layers 1/2" Fire-Shield C Gypsum Board applied vertically to opposite side. 3" mineral wool insulation in stud cavities.
2 hr.	V438	 1/2" PermaBase applied vertically or horizontally over two layers 5/8" Fire-Shield Gypsum Board applied vertically to each side of 2-1/2" steel studs 16" o.c. PermaBase secured to studs with cement board screws of adequate length to penetrate studs 3/8" spaced 8" o.c.
2 hr.	U420	 1/2" PermaBase applied vertically or horizontally over two layers 5/8" Fire-Shield Gypsum Board applied vertically to each side double row of 1-5/8" steel studs 16" o.c. spaced 6" apart. PermaBase secured to studs with cement board screws of adequate length to penetrate studs 3/8" spaced 8" o.c.
2 hr. Load Bearing	U425	 1/2" PermaBase applied vertically or horizontally over two layers 5/8" Fire-Shield Gypsum Board applied vertically to each side of 3-1/2", 20 gauge steel studs 16" o.c. PermaBase secured to studs with cement board screws of adequate length to penetrate studs 3/8" spaced 8" o.c.
3 hr.	V438	 1/2" PermaBase applied vertically or horizontally over three layers 5/8" Fire-Shield Gypsum Board applied vertically to each side of 2-1/2" steel studs 16" o.c. PermaBase secured to studs with cement board screws of adequate length to penetrate studs 3/8" spaced 8" o.c.
UL LISTED PERMABASE® CEMENT BOARD PARTITIONS – WOOD FRAMING		
Fire Rating	UL Design No.	Description
1 hr.	U392	 1/2" PermaBase applied vertically or horizontally to one side of 2x4 wood studs 16" o.c. with 1-1/4" cement board screws spaced 8" o.c. Ceramic tile installed over PermaBase. 5/8" Fire-Shield Gypsum Board applied vertically or horizontally to opposite side with 6d nails spaced 7" o.c. 3-1/2" mineral wool insulation in stud cavities.
1 hr.	U392	 1/2" PermaBase applied vertically or horizontally to each side of 2x4 wood studs 16" o.c. with 1-1/4" cement board screws spaced 8" o.c. Ceramic tile installed over PermaBase. 3-1/2" mineral wool insulation in stud cavities.
2 hr.	U301	 1/2" PermaBase applied vertically over two layers 5/8" Fire-Shield Gypsum Board, applied either horizontally or vertically to each side of 2x4 wood studs 16" o.c. PermaBase secured to studs with cement board screws of adequate length to penetrate studs 3/4" spaced 8" o.c.
2 hr.	U371	 1/2" PermaBase applied vertically over either two layers 5/8" Gypsum Board, applied either horizontally or vertically to the interior side of 2x4 wood studs 16" o.c., or over 5/8" Gypsum Sheathing applied to exterior side with portland cement stucco, brick veneer, thin brick finishes. PermaBase secured to studs with cement board screws of adequate length to penetrate studs 3/4" spaced 8" o.c.