Fire-Rated Wall Assemblies

PermaBase Cement Board has been tested and/or approved for use in a variety of fire-rated wall systems.

1-Hour Rating — The 1-hour wall assembly consists of 3-5/8" steel studs, 16" o.c., one layer of 7/16" PermaBase PLUS or 1/2" PermaBase attached horizontally or vertically with 1-1/4" long cement board screws 8" o.c. in the field and perimeter on one side and one layer of 5/8" Fire-Shield* gypsum board attached vertically on opposite side with joints staggered to those of opposite side, with 1-1/4" long drywall screws 8" o.c. in the field and perimeter with 3" thick mineral fiber insulation batts in the stud cavities. UL V452.

1-Hour Rating

- 1. PermaBase Cement Board
- 2. Steel studs
- 3. 3" mineral fiber insulation
- 4. 5/8" Fire-Shield Gypsum Board



2-Hour Fire Rating – The 2-hour wall assembly consists of 3-5/8" steel studs, 16" o.c. on one side, base layer of 1/2" Fire-Shield C or 5/8" Fire-Shield gypsum board attached vertically with 1" drywall screws 24" o.c. in the field and perimeter and face layer of 7/16" PermaBase PLUS or 1/2" PermaBase attached vertically with 1-5/8" cement board screws, 8" o.c. in the field and perimeter. Two layers of 1/2" Fire-Shield C or 5/8" Fire-Shield gypsum board applied vertically to the opposite side, base layer attached with 1" drywall screws 24" o.c. in the field and perimeter and face layer attached with 1-5/8" drywall screws 12" o.c. in the field and perimeter, with 3" thick mineral fiber insulation batts in the stud cavities. All joints staggered between face and base layer. UL V452.

2-Hour Rating

- 1. PermaBase Cement Board
- 2. Steel studs
- 3. 3" mineral fiber insulation
- 4. 1/2" Fire-Shield C Gypsum Board





