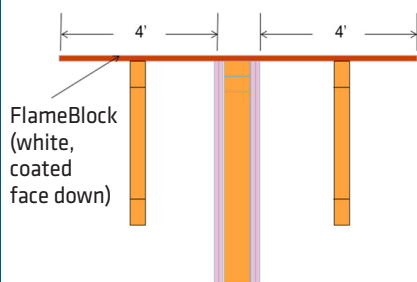


## Application: Multifamily roof decks – fire wall continuity

### Description:

- Where the shared, or “common” wall separating occupancies meets a roof deck, code\* requires either
  - a) extension of the firewall 30” beyond the roof vertically (parapet construction)
  - b) Use of Class A flame spread rated sheathing for 4’ on each side of the wall where it intersects the roof deck
  - c) Type X gypsum wallboard installed underneath roof deck 4’ on each side of fire wall.



**LP Certification/Listing:** ICC-ESR #1365

### Common Applications:

- FRT plywood
- Type X Gypsum wall board

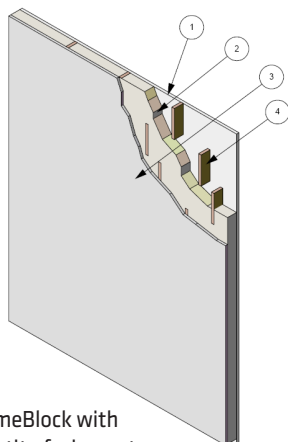
### LP FlameBlock Sheathing Applications:

- LP FlameBlock sheathing is a direct substitution with Pyrotite facing down

## Application: 1-hour rated exterior fire wall – zero lot line applications

### Description:

- 2009 IRC requires walls built within 5’ of a property line or within 5’ of another building on the same property to have a 1 hour fire resistance rating with fire exposure from the exterior of the building (NOTE: Code\* requirements vary)
- An addendum to the assembly allows for the use of common claddings, including SmartSide, fiber cement, and T1-11 panels.
- Assembly is listed with Intertek, not UL (See below)
- This assembly is load restricted. An engineering evaluation will be required to insure that various compressive, axial, and shear strength requirements are met



1. FlameBlock with Pyrotite facing out
2. Mineral wool insulation
3. 5/8 Type X gypsum
4. 2 x 6 wood stud

**LP Certification/Listing:** Intertek Labs - BTC/WA 60-01

### Common Applications:

- 5/8-inch exterior gypsum (such as GP Densglass) installed behind the exterior cladding
- Three-coat stucco
- Fiber cement board cladding installed over 5/8 Type X gypsum wallboard and structural (shear) sheathing.
- May use 9’, 10’ or 12’ lengths to address fire wall continuity.

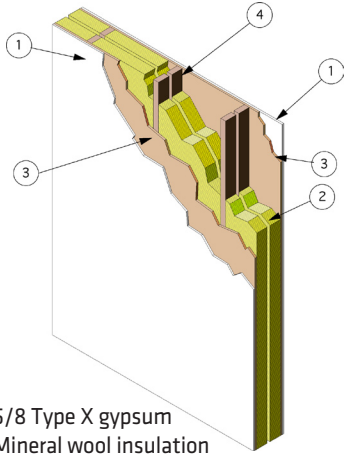
### LP FlameBlock Sheathing Applications:

- LP FlameBlock should be installed with Pyrotite facing the exterior cladding.

## Application: 2-hour interior party wall – common wall in townhome construction

### Description:

- Double-stud party wall dividing units within a single building
- Structural/shear-rated wall
- **FlameBlock may be placed on either side of studs.**



1. 5/8 Type X gypsum
2. Mineral wool insulation
3. LP FlameBlock with Pyrotite facing wall studs
4. 2-2 x 4 wood studs

**LP Certification/Listing:** Underwriters Labs U350

### Common Applications:

- Two layers of 1" thick x 24" wide "Shaft wall liner" fire-rated gypsum with metal "H-studs", installed between the two stud walls
- Typically, one side is built, then shaftliner is installed, then other wall is "tilted up" into position

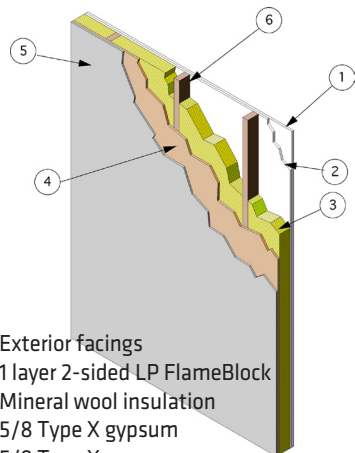
### LP FlameBlock Sheathing Applications:

- LP wall assembly for this application requires 2 – 2x4 wood studs at least 1" apart, 1 layer of 15/32 LP® FlameBlock® sheathing & 1 layer of 5/8 Type X gypsum with mineral wool insulation in both stud cavities and Pyrotite® facing wall studs (See assembly for details)

## Application: 2-hour rated exterior wall – Type IIIA Construction

### Description:

- Designed to be used in commercial or multifamily residential buildings of 3-6 stories (Type IIIA)
- Type IIIA construction is required to have non-combustible exterior walls (no wood) that have been rated, under load, to last at least 2-hours in a fire with exposure on the inside wall surface
- FRT wood framing is allowed as an exception within the IBC Code\*
- Structural/shear-rated wall with interior fire exposure rating
- LP wall assembly for this application has been allowed by building code officials\*



1. Exterior facings
2. 1 layer 2-sided LP FlameBlock
3. Mineral wool insulation
4. 5/8 Type X gypsum
5. 5/8 Type X gypsum
6. 2 x 4 wood stud

**LP Certification/Listing:** Underwriters Labs U349

### Common Applications:

- Two layers of 5/8-inch, fire-rated gypsum on the interior with steel framing or FRT wood framing, FRT plywood exterior sheathing, and 5/8-inch exterior, fire-rated gypsum (such as GP DensGlass) (See U371)
- May use 9', 10' or 12' lengths to address fire wall continuity.

### LP FlameBlock® Sheathing Applications:

- LP wall assembly requires 2x4 wood studs, 1 layer of 2-sided 15/32 LP FlameBlock sheathing & 2 layers of 5/8 Type X gypsum with mineral wool insulation on the interior side of the wall

## Application: Type I and II roof decks – strip malls and small commercial

### Description:

- FRT is typically used as the roof deck, usually over foam insulation, as the walkable surface underneath rubber membranes
- EPDM and TPO single-ply membranes glued directly to the FRT plywood
- ICC-ES Report #1365 requires that the LP FlameBlock sheathing be treated “both-sides” to be considered equivalent to FRT in this application



**LP Certification/Listing:** Underwriters Labs TGFU R21591

### Common Application:

- FRT Plywood

### LP FlameBlock Sheathing Application:

- 2-sided LP FlameBlock sheathing

## Application: Open soffit exposures

### Description:

- FlameBlock has been approved by California’s Office of the State Fire Marshall’s (OSFM) and will soon be added to their Approved Products list. Product is currently on the list as a soffit and limited ignition material under the Blazeguard name
- In an open soffit application, California code\* allows LP FlameBlock sheathing to be used as the roof deck material over the roof rafter “tails”, Pyrotite facing down
- The warranty period for this application is currently 2 years. We are conducting testing to support extension of the warranty



**LP Certification/Listing:** California OSFM  
Approved Product List

### Common Application

- Approved, ignition-resistant materials, such as fiber cement, installed as the “ceiling” of the open eaves

### LP FlameBlock Sheathing Application:

- LP FlameBlock sheathing with Pyrotite facing down

## Application: WUI Zone exterior wall

### Description:

- In high risk fire zones in California, exterior walls that are not otherwise required to be 1-hour rated must meet requirements for fire resistance
- LP FlameBlock sheathing has been evaluated to be used with the following architectural claddings:
  1. LP SmartSide Lap and Panel Siding
  2. 1/2" Cedar or Redwood
- Other claddings may be substituted with local building inspector approval



**LP Certification/Listing:** California OSFM Approved Product List and Cal WUI protocol 12-7A-1

### Common Practice:

- Fiber cement board claddings

### LP FlameBlock Sheathing Application:

- LP FlameBlock sheathing with Pyrotite facing out

## Application: Wood framed, low-slope commercial roof decks (Type V)

### Description:

- In some places, commercial roof decks (like warehouse space) are constructed with wood frames
- If the roof deck is wood framed, FRT plywood is allowed as the roof deck
- LP FlameBlock sheathing may be used as a substitute for FRT plywood in these applications
- Please ask for assistance if you have this type of application



**LP Certification/Listing:** UNDERWRITERS LABS TGFU R21591

### Common Practice:

- FRT Plywood

### LP FlameBlock Sheathing Application:

- Depending on the building design type and location, one or two-sided LP FlameBlock sheathing may be required and Pyrotite treated single side may be required to face up or down

## Application: Covered and “boxed-in” soffit

### Description:

- Western US building design often prefers to leave the soffit area open, but to cover the roof deck exposed between the rafter tails with a decorative wood material
- Or builders may prefer to “box-in” the underside of the rafter tails by attaching a decorative cladding to the underside of the rafters
- In either of these cases, if the exposed, decorative material (the soffit “ceiling”) is not on the OSFM’s list of approved products for this application, the entire design must meet the performance requirements of a test specifically designed for this application: California SFM Standard 12-7A-3
- LP® FlameBlock® sheathing has passed the requirements for SFM Standard 12-7A-3 utilizing 5/8” cedar as a decorative cladding. The fire test was constructed to present a “worst case” scenario and therefore cover any commercially available cedar or redwood cladding



**LP Certification/Listing:** LP 12-7a-3 Test Report from Western Fire Center

### Common Application:

- Approved, ignition-resistant materials, such as fiber cement, as the soffit ceiling, sometimes with fire-rated gypsum behind it

### LP FlameBlock Sheathing Application:

- LP FlameBlock sheathing with Pyrotite facing down