

Back-Lattice_{sm} Wall System is a steel-stud, 1 and 2-hour rated, load-bearing, high-performance wall assembly:

While having the benefits of being a thermal and moisture-efficient high-performance wall assembly, The Back-Lattice_{sm} System is also a proven fire-rated load-bearing wall assembly that utilizes steel-studs and closed-cell spray foam located inward of its protective gypsum sheathing. In a hybrid arrangement, mineral wool is also integrated for its fire-resistance, while it is kept dry for maintaining its thermal efficiency.



Figure 1: Back-Lattice_{sm} places the thermally broken structural, thermal, and vapor control layers directly inward of the air and water-protected sheathing.

Due to its closed-cell foam-plastic insulation, Back-Lattice_{sm} complies with the code's requirement of compliance with NFPA 285, Vertical and Lateral Fire Propagation. Priest & Associates has prepared its NFPA 285, EEV, Rev6c. Back-Lattice is a patented wall assembly method of Back-Lattice Wall System, Inc.)

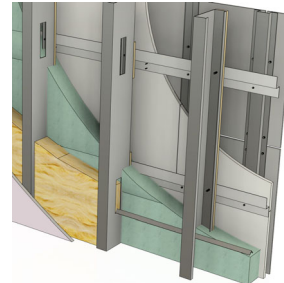


Figure 2: Back-Lattice_{sm} encapsulates with 3 5/8" closed-cell spray foam, the crisscross back-framing of the horizontal back-furring on thermal isolation pads and the structural vertical studs. Mineral wool batt is added for the 2hr fire-assembly or for supplemental R15 insulation.

Back-Lattice_{sm} System is NFPA 285 compliant as required for compliance due to its closed-cell spray foam core.

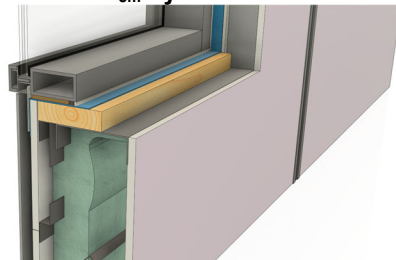


Figure 3: BKL with NFPA 285 approved wall opening with 3/4" PT plywood or 1 1/2" PT wood at sill return.

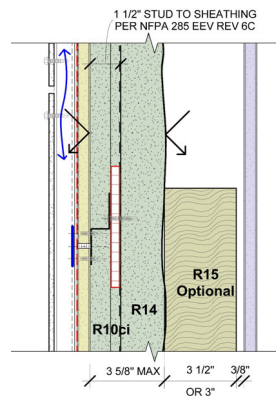


Figure 4: BKL's approved NFPA 285 assembly, with continuous insulation thickness ranging from 1 1/2" up to 3".

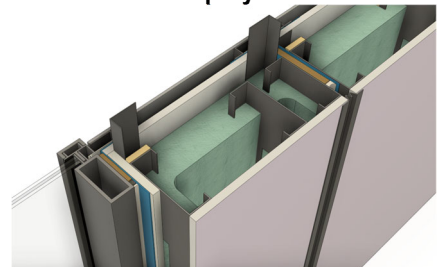


Figure 5: BKL with NFPA 285 approved wall opening with 5/8" gypsum sheathing, or 3/4" PT Plywood, or 1 1/2" PT wood at jamb and head returns. Panel joint closed with 4# mineral wool, compressed 50%.

Back-Lattice_{sm} System is Intertek tested and listed for 1 and 2-Hr from both the Interior and Exterior Exposures.

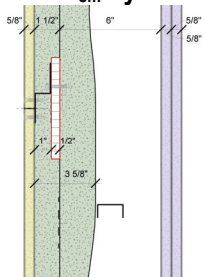


Figure 6: BKL as Intertek tested, 1hr from the interior, 100% load-bearing.

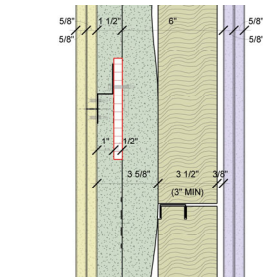


Figure 7: BKL as Intertek tested, 2hr from the interior, 80% of stud rating load-bearing.

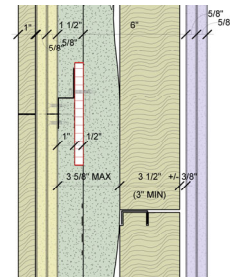


Figure 8: BKL as Intertek tested, 2hr from the exterior, 100% load-bearing.

Back-Lattice_{sm} System is uniquely qualified as a steel-stud, foam-core-filled, load-bearing, and fire-rated solution.