FIRE RESISTANCE RATING

Testing conducted in accordance with **CAN/ULC-S101/ASTM E-119-08A,** Fire Endurance Test of Building Construction and Material.

Material	Application Description	Time to Flame Through
3/8" OSB Sheathing	CAN/ULC S101-07 Standard Method of Fire Endurance Tests of Building and Construction Materials. 3/8" OSB Sheathing coated with SafeCoat® Latex at 160 sq. feet per gallon.	**17 minutes**
Floor/Ceiling Assembly with ¾" OSB	Tested in accordance with the ASTM E-119-05A Floor/Ceiling; NFPA 251-06, Small Scale Test, and CAN 4-S101-04. 2"x10" nominal SPF floor joists 16" on centre. 3/4" oriented strand board flooring. Underside assembly coated with SafeCoat® Latex at 150 sq. ft. per gallon	**46 minutes 37 seconds**
Floor/Ceiling Assembly with ¾" OSB and 5/8" Type-X Gypsum	Tested in accordance with the ASTM E-119-05A Floor/Ceiling; NFPA 251-06, Small Scale Test, and CAN 4-S101-04. 2"x10" nominal SPF floor joists, 16" on centre. 3/4" oriented strand board flooring, 5/8" type X gypsum with the exposed side of the gypsum coated with SafeCoat® Latex at 150 sq. feet per gallon. There was no flame-through as the test was terminated due to heavy smoke at 1-3/4 hours.	**1-3/4 hour**
Floor/Ceiling Assembly with ¾" OSB and 24 Gauge Sheet Metal	Tested in accordance with CAN/ULC S101 Closed Floor/Ceiling Assembly with ¾" OSB and 24-Gauge Sheet Metal Ceiling coated with SafeCoat® Latex at 150 sq. ft. per gallon. Test was terminated at 60 minutes with no failure.	**1 hour**
½" Regular Gypsum Wall Assembly	Tested in accordance with CAN/ULC S101-07 Standard Test Method for Fire Tests of Building Construction and Materials. Assembly consisted of ½" drywall; 2x4 wood stud frame; unbacked horizontal seam taped and mudded; 3.5" thick R-12 fibreglass insulation; and SafeCoat® Latex applied at 100 sq. ft. per gallon. The assembly met burn-through and temperature rise requirements for 63 minutes.	**63 minutes**

TEST RESULTS

FLAME and SMOKE DEVELOPED RATING

Testing was conducted in accordance with **ASTM E84** and **CAN/ULC-S102** "Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies".

Material	Application Description	Flame Spread Rating	Smoke Developed Classification
Douglas Fir Lumber	**SafeCoat® Latex** at a rate of 3.7 m2/L or 150 sq. feet per gallon	5	5
SPF Plywood	**SafeCoat® Latex** at a rate of 3.7 m2/L or 150 sq. ft. per gallon.	5	0
Oriented Strand Board	OSB (11 mm nominal thickness), coated with **SafeCoat® Latex** at a rate of 3.7m2/L or 150 sq. ft. per gallon.	10	20
High Density Polyurethane Foam Ignition Barrier	Coated with **SafeCoat® Latex** at 80 sq. feet per gallon meets the ignition barrier. This does not qualify the product as a thermal barrier over polyurethane spray foam which is part of the Canadian code requirement for all applications. The addition of 3/8" OSB or SPF plywood coated with the **SafeCoat® Latex** as per above, over the spray foam would satisfy the thermal and ignition requirement.	25	150
3/8" OSB Sheathing for Residential Construction. Coated boards must bear the ULC-approved stamp.	Mineral & Fibre Board Listing CAN/ULC-S102 satisfies code requirements for residential construction for flame spread in Edmonton and Calgary jurisdictions for side-walls closer than 1.5 meters or outside the 10-minute response time. **SafeCoat® Latex** is listed and the application must also be listed. This requires the application to be done in a controlled environment by a certified applicator. Boards must bear the ULC Listed Stamp for Mineral and Fibre Boards. These boards meet the Class A Flame Spread requirement as well as the 15-Minute Fire Resistance requirement (see test below). Contact Quantum for additional information on availability of this coated product.	10	20
Douglas Fir Plywood	**SafeCoat® Latex Black** at a rate of 3.7 m2/L or 150 sq. feet per gallon	0	60

*Suitable latex paints may be applied in 1 coat on the **SafeCoat® Latex** to achieve a different colour, sheen, or more cleanable finish or when the product will be subject to frequent cleaning. Contact Quantum or Quantum distributors for additional information if required.