

CONTENTS

 04
 06
 08

LP® FLAMEBLOCK® **FIRE-RATED SHEATHING OVERVIEW**

USES AND TECHNICAL INFORMATION

PROPERTIES

09

ROOF DECK APPLICATIONS **10**

SINGLE-FAMILY WALL **ASSEMBLIES**

TOWNHOUSE SEPARATION WALL ASSEMBLIES

12

TYPE I & II CONSTRUCTION **EXTERIOR WALL SYSTEMS**

20

LP WEATHERLOGIC® **ASSEMBLIES**

13

TYPE III CONSTRUCTION **EXTERIOR WALL ASSEMBLIES**

22 26

WOOD STUD ASSEMBLIES 16

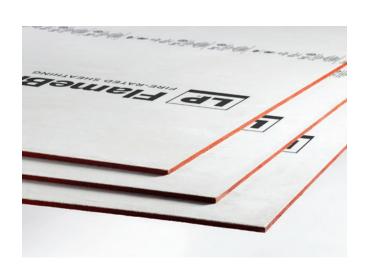
TYPE V CONSTRUCTION **EXTERIOR WALL ASSEMBLIES**

STEEL STUD ASSEMBLIES





LP® FLAMEBLOCK® FIRE-RATED SHEATHING



Innovative Design: Made with LP's proprietary non-combustible, fiberglass-reinforced Pyrotite® coating bonded to the board on one or both sides.

Backed by LP: As with all of our products you'll be backed by LP, one of the biggest names in the industry serving customers nationwide since 1973. Choose LP FlameBlock Fire-Rated Sheathing for your next project.





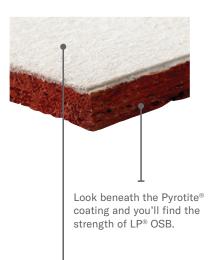
MEET CODE. EXCEED EXPECTATIONS.®

LP® FlameBlock® Fire-Rated Sheathing is evaluated to meet code requirements for fire-resistant construction as a component of 1-hour and 2-hour wall assemblies and in roof deck applications.

LP FLAMEBLOCK APPLICATIONS

- Evaluated by ICC-ES (<u>ESR-1365</u>, <u>ESL-1002</u>, <u>PMG-1089</u>)
- UL and Intertek fire-resistant rated wall assemblies tested in accordance with ASTM E119
- Evaluated to the performance requirements of IBC Section 2303.2 (Fire-retardant treated wood)
- Component of fire-resistance-rated construction (2021 IBC Section 703)
- Wall sheathing for exterior walls of Type III construction with a twohour rating or less; 2-Sided FlameBlock Sheathing required
- Exterior walls and roof sheathing on buildings of Type I or II construction (2021 IBC section 603. 1); 2-Sided FlameBlock Sheathing required
- Roof sheathing on building of Type II, IV, V and residential construction for a distance of 4 feet on both sides of a fire wall (2021 IBC Section 706.6, exception 4.3 and 2018 IRC Section R302.2.4 exception)
- Class A interior finish material for walls and ceilings of Type V construction (2021 IBC Section 803); Pyrotite coating facing the interior of the building
- Component of fire-classified roof covering assemblies (2021 IBC Section 1505.1)
- Thermal barrier of separating foam plastic insulation from the interior of a building (2021 IBC Section 2603.4); Pyrotite coating facing the interior of the building





LP® FlameBlock® Fire-Rated Sheathing features a proprietary non-combustible, fiberglassreinforced Pyrotite® coating.

DESIGN STRENGTH AND FLEXIBILITY

LP FlameBlock panels carry load/span and shear design values equivalent to an untreated wood structural panel of the same thickness evaluated in accordance with US DOC PS 1 and PS 2. Using LP FlameBlock sheathing provides design flexibility by combining structural capacity and fire resistance in a single panel. It may eliminate a layer of gypsum to simplify and expedite the construction process.

EXPOSURE 1

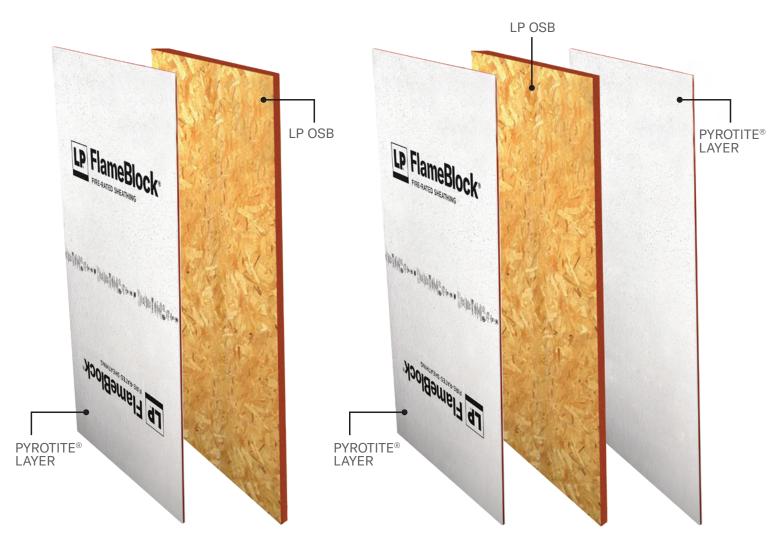
Exposure 1 classification signifies that LP FlameBlock sheathing is intended to resist the effects of moisture on structural performance during active construction. The fire resistance of LP FlameBlock sheathing is not impacted by exposure to moisture during construction.

// 6 // 7

LP® FLAMEBLOCK® PROPERTIES

1-SIDED LP FLAMEBLOCK SHEATHING

2-SIDED LP FLAMEBLOCK SHEATHING



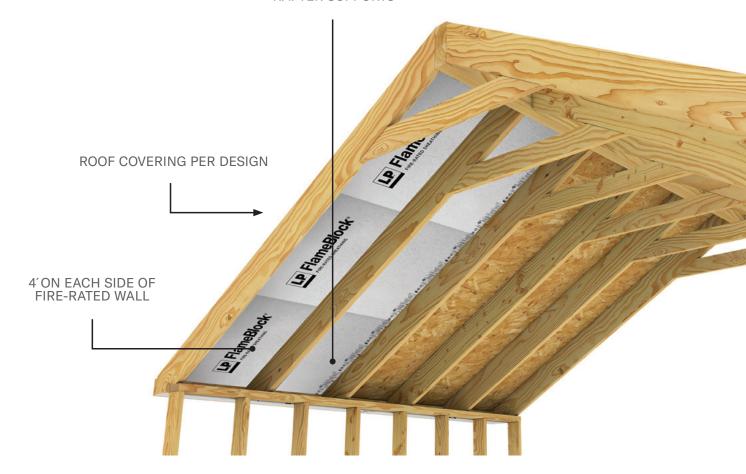
Nominal panel thickness and weights of LP FlameBlock Fire-Rated Sheathing

LP® FLAMEBLOCK® Panel Performance Category	NOMINAL FINISHED PANEL THICKNESS (IN.)		NOMINAL PANEL WEIGHT (PSF)	
	COATED ONE SIDE	COATED BOTH SIDES	COATED ONE SIDE	COATED BOTH SIDES
3/8	7/16	1/2	1.9	2.5
7/16	1/2	9/16	2.1	2.7
15/32	17/32	19/32	2.2	2.8
19/32	21/32	23/32	2.6	3.2
23/32	25/32	27/32	3.0	3.6

ROOF DECK APPLICATIONS

- Roof sheathing for 4 feet on both sides of a fire wall (ESR-1365 Section 4.2a)
- 2021 IRC Section 302.2.4 Exception
- 2021 IBC Section 706.6, Exception 4.3
- For construction Type III, IV, V and townhouses—1-Sided LP FlameBlock Panel with coated side facing the interior
- Roof sheathing in roof deck applications for construction Type I and II (ESR-1365 Section 4.2b)—2-Sided LP FlameBlock panels required

1-SIDED LP® FLAMEBLOCK® SHEATHING INSTALLED ON RAFTER SUPPORTS



// 8

SINGLE-FAMILY

LP® FlameBlock® 1-Hour Fire Resistance Rated Wall Assemblies for single-family construction with fire separation distances (FSD) less than 5′-0″ per IRC Table R302.1(1). LP FlameBlock assemblies for 1-hour fire resistance have resistance from either side and can eliminate the use of exterior gypsum. Maintains consistent wall thickness with unrated walls.

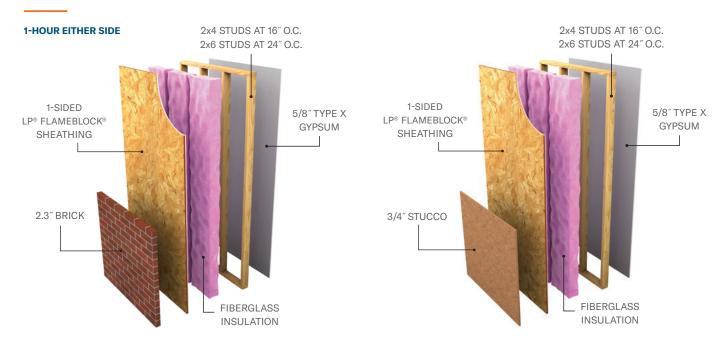
See pages 22-27 for additional assemblies. Reference assembly listings for additional information.

TOWNHOUSE SEPARATIONS

V340 REPLACES PREVIOUS INTERTEK ASSEMBLY DESIGN NUMBER LPB/WPPS 60-01



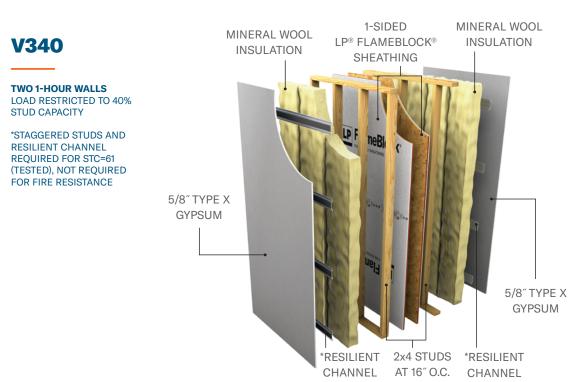
U348



COMMON 2-HOUR FIRE-RESISTANCE RATED WALL ASSEMBLY: IRC SECTION R302.2.2 SEE PAGES 22-27 FOR ASSEMBLIES CONTINUOUS FROM FOUNDATION TO ROOF SHEATHING



TWO 1-HOUR FIRE-RESISTANCE RATED WALL ASSEMBLIES: IRC SECTION R302.2.1 DOUBLE WALLS



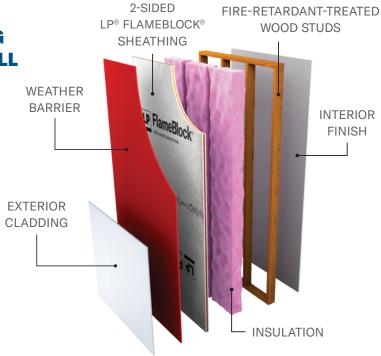
// 10 // 11

TYPE I & II CONSTRUCTION

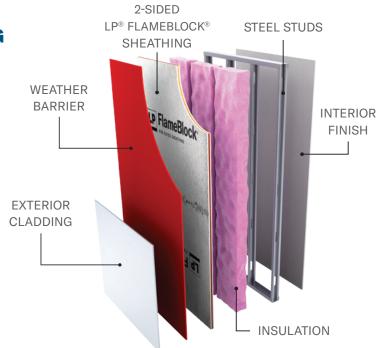
2-sided LP® FlameBlock® sheathing is required for exterior walls and roof deck applications in buildings of Type I & II construction.

Ideal for exterior claddings attached directly to a structural panel. Many water-resistive coatings have been evaluated and demonstrated chemical compatibility with LP FlameBlock sheathing. Please see LP Technical note.

TYPE I & II NON-BEARING EXTERIOR WALL



TYPE I & II NON-BEARING EXTERIOR WALL

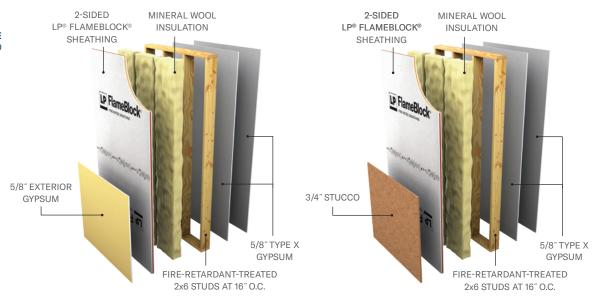


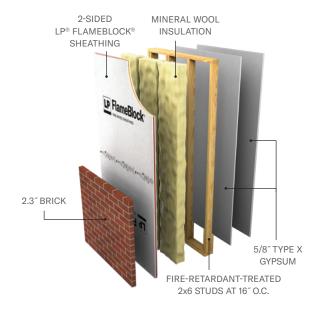
TYPE III CONSTRUCTION

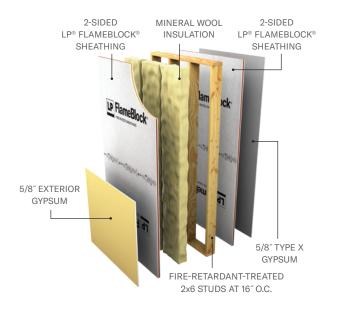
2-sided LP® FlameBlock® sheathing and non-combustible or fire-retardant-treated wood (FRTW) studs are required for exterior walls in buildings of Type III construction. See pages <u>22-27</u> for other wood and metal stud assembly options not shown and assembly design listings for additional information.

V337

2-HOUR EITHER SIDE LOAD RESTRICTED TO 73% STUD CAPACITY







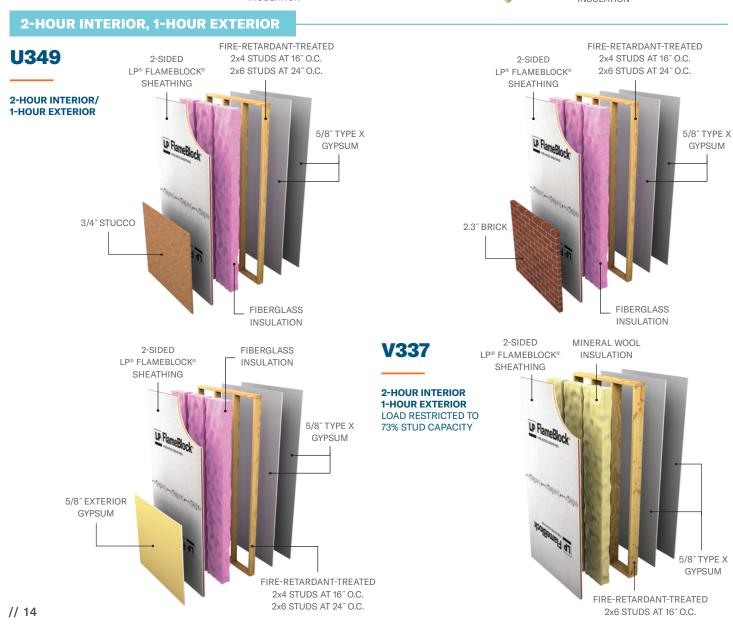
// 12

TYPE III CONSTRUCTION

2-sided LP® FlameBlock® sheathing and non-combustible or fire-retardanttreated wood (FRTW) studs are required for exterior walls in buildings of Type III construction. See pages <u>22-27</u> for other wood and metal stud assembly options

not shown and assembly design listings for additional information.

2-HOUR EITHER SIDE FIRE-RETARDANT-TREATED FIRE-RETARDANT-TREATED 2x4 STUDS AT 16" O.C. 2-SIDED 2-SIDED 2x4 STUDS AT 16" O.C. **U349** 2x6 STUDS AT 24" O.C. LP® FLAMEBLOCK® LP® FLAMEBLOCK® 2x6 STUDS AT 24" O.C. SHEATHING SHEATHING 2-HOUR EITHER SIDE 5/8" TYPE X 5/8" TYPF X GYPSUM GYPSUM 3.4" BRICK MINERAL WOOL FIBERGI ASS INSULATION INSULATION



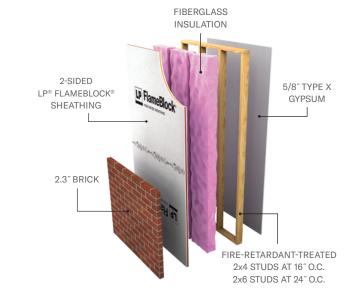
TYPE III CONSTRUCTION

2-sided LP® FlameBlock® sheathing and non-combustible or fire-retardanttreated wood (FRTW) studs are required for exterior walls in buildings of Type III construction. See pages <u>22-27</u> for other wood and metal stud assembly options not shown and assembly design listings for additional information.









1-HOUR INTERIOR ONLY



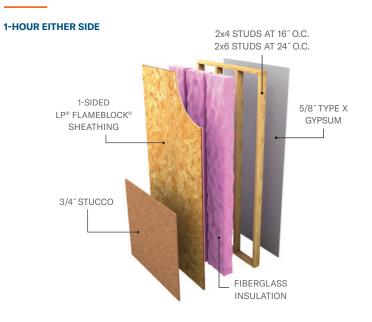
TYPE V CONSTRUCTION

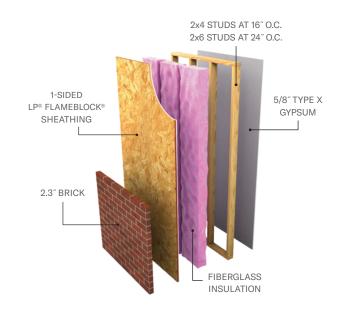
See pages 22-27 for other wood and metal stud assembly options not shown and assembly design listings for additional information.

1-HOUR EITHER SIDE



U348

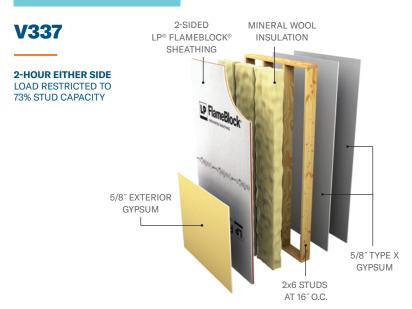


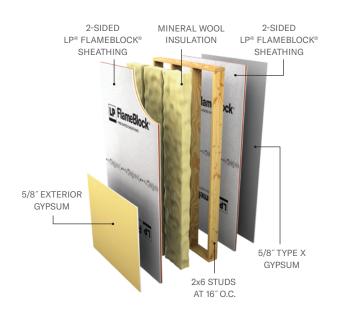


1-HOUR INTERIOR ONLY



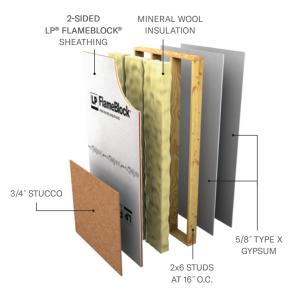
2-HOUR EITHER SIDE

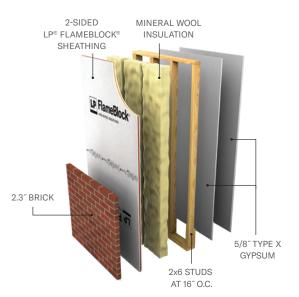






2-HOUR EITHER SIDE LOAD RESTRICTED TO 73% STUD CAPACITY





// 16 // 17

TYPE V CONSTRUCTION

See pages <u>22-27</u> for other wood and metal stud assembly options not shown and assembly design listings for additional information.

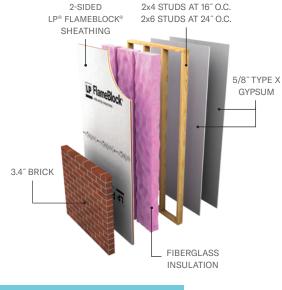
TYPE V CONSTRUCTION

See pages 22-27 for other wood and metal stud assembly options not shown and assembly design listings for additional information.

2-HOUR EITHER SIDE

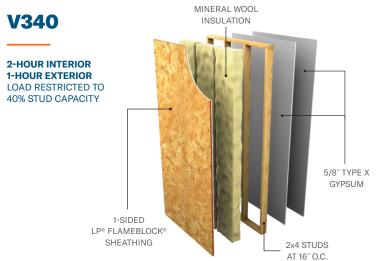
U349

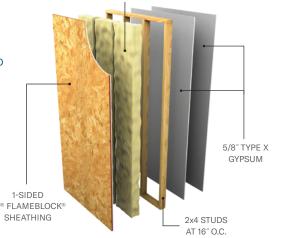
2-HOUR EITHER SIDE

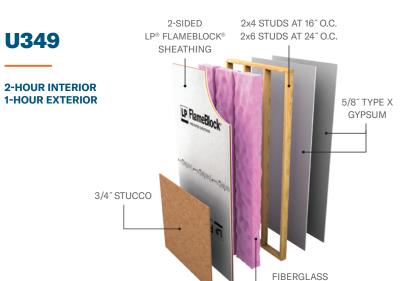




2-HOUR INTERIOR, 1-HOUR EXTERIOR





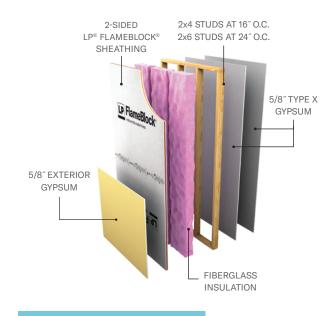


INSULATION





2-HOUR INTERIOR, 1-HOUR EXTERIOR





2-HOUR INTERIOR ONLY

U349

2-HOUR INTERIOR **RESISTANCE ONLY**



LP WEATHERLOGIC® ASSEMBLIES

SINGLE FAMILY

1-HOUR EITHER SIDE





TYPE V ASSEMBLY

1-HOUR EITHER SIDE

LPC/WPPS 60-01

LPC/WPPS 60-02





TYPE V ASSEMBLY

1-HOUR INTERIOR ONLY

U356

1-HOUR INTERIOR RESISTANCE ONLY



// 20 // 21

ASSEMBLIES

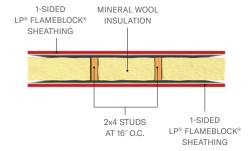
WOOD STUDS

- Reference the UL listings for alternate configurations and additional information.
- The use of 2-sided LP® FlameBlock® sheathing or fire-retardant-treated wood framing may be required by the building Construction Type. Reference section 4.2 in ICC-ES ESR 1365 for additional information not shown.

45-MINUTE EITHER SIDE

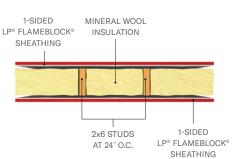
V338

45-MINUTE EITHER SIDE LOAD RESTRICTED TO 51.2% STUD CAPACITY



V339

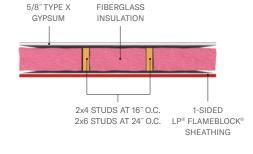
45-MINUTE EITHER SIDE LOAD RESTRICTED TO 60.6% STUD CAPACITY



1-HOUR INTERIOR ONLY

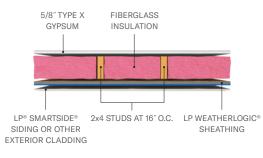
U348

1-HOUR INTERIOR **RESISTANCE ONLY**



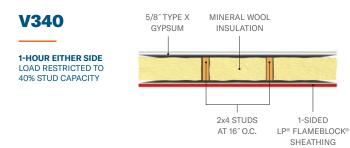
U356

1-HOUR INTERIOR **RESISTANCE ONLY**



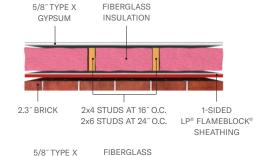
1-HOUR EITHER SIDE

V340 REPLACES PREVIOUS INTERTEK ASSEMBLY DESIGN NUMBER LPB/WPPS 60-01



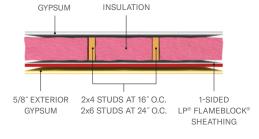
U348

1-HOUR EITHER SIDE



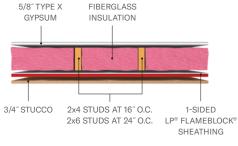
U348

1-HOUR EITHER SIDE



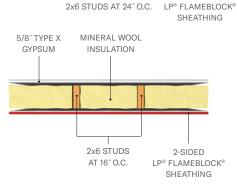
U348

1-HOUR EITHER SIDE



V337

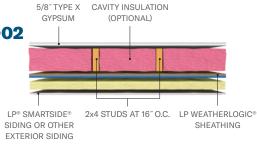
1-HOUR EITHER SIDE LOAD RESTRICTED TO 73% STUD CAPACITY

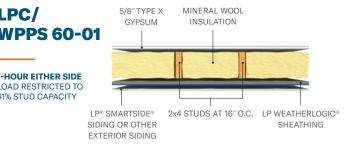


1-HOUR EITHER SIDE

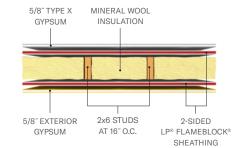
MINERAL WOOL 5/8" TYPE X LPC/ GYPSUM INSULATION **WPPS 60-01** 1-HOUR EITHER SIDE LOAD RESTRICTED TO 41% STUD CAPACITY LP® SMARTSIDE® 2x4 STUDS AT 16" O.C. LP WEATHERLOGIC® SIDING OR OTHER

LPC/ **WPPS 60-02**





73% STUD CAPACITY



V337

V337

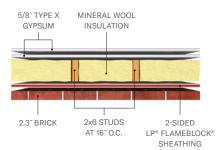
2-HOUR EITHER SIDE

LOAD RESTRICTED TO

73% STUD CAPACITY

2-HOUR EITHER SIDE LOAD RESTRICTED TO

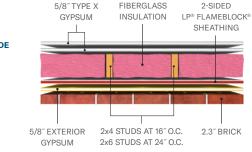
2-HOUR EITHER SIDE



2-HOUR EITHER SIDE

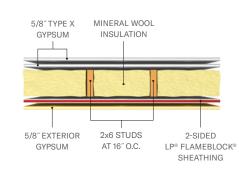
U349

2-HOUR EITHER SIDE



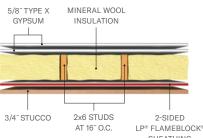
V337

2-HOUR EITHER SIDE LOAD RESTRICTED TO 73% STUD CAPACITY



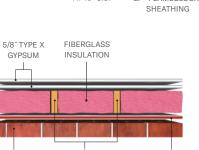
V337

2-HOUR EITHER SIDE LOAD RESTRICTED TO 73% STUD CAPACITY



U349

2-HOUR EITHER SIDE



2-SIDED

SHEATHING

LP® FLAMEBLOCK®

3.4" BRICK 2x4 STUDS AT 16" O.C.

2x6 STUDS AT 24" O.C.

// 23 // 22

ASSEMBLIES

WOOD STUDS

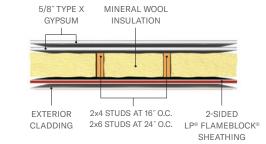
- Reference the UL listings for alternate configurations and additional information.
- The use of 2-sided LP® FlameBlock® sheathing or fire-retardant-treated wood framing may be required by the building Construction Type. Reference section 4.2 in ICC-ES ESR 1365 for additional information not shown.

2-HOUR EITHER SIDE 2-HOUR INTERIOR, 1-HOUR EXTERIOR FIBERGLASS 5/8" TYPE X MINERAL WOOL 5/8" TYPE X **U349 V337** GYPSUM GYPSUM INSULATION 2-HOUR EITHER SIDE 2-HOUR INTERIOR 1-HOUR EXTERIOR LOAD RESTRICTED TO 73% STUD CAPACITY MINERAL FIRE-RETARDANT-TREATED 2x6 STUDS 2-SIDED 2x4 STUDS AT 16" O.C. LP® FLAMEBLOCK® AT 16" O.C. LP® FLAMEBLOCK® 2x6 STUDS AT 24" O.C. SHEATHING MINERAL WOOL 5/8" TYPE X MINERAL WOOL **V340** 5/8" TYPE X **V340** INSULATION GYPSUM GYPSUM INSULATION 2-HOUR EITHER SIDE 2-HOUR INTERIOR LOAD RESTRICTED TO 1-HOUR EXTERIOR 40% STUD CAPACITY LOAD RESTRICTED TO 40% STUD CAPACITY 2x4 STUDS 1-SIDED AT 16" O.C. LP® FLAMEBLOCK® 3.4" BRICK 2x4 STUDS 2-SIDED SHEATHING LP® FLAMEBLOCK® SHEATHING 5/8" TYPE X FIBERGLASS **U349** GYPSUM INSULATION FIBERGLASS **U350 A** INSULATION 1-SIDED 1-SIDED 2-HOUR INTERIOR LP® FLAMEBLOCK® LP® FLAMEBLOCK® 1-HOUR EXTERIOR 2-HOUR EITHER SIDE SHEATHING SHEATHING Staggered studs for STC=61, not required for fire resistance 3/4" STUCCO 2x4 STUDS AT 16" O.C. 2-SIDED 2x6 STUDS AT 24" O.C. LP® FLAMEBLOCK® 5/8" TYPE X SHEATHING GYPSUM 5/8" TYPE X 5/8" TYPE X FIRERGI ASS GYPSUM **U349** GYPSUM INSULATION 2x4 STUDS AT 16" O.C. 2-HOUR INTERIOR 2x6 STUDS AT 24" O.C. **U350 B** FIBERGI ASS INSULATION 1-SIDED 1-SIDED LP® FLAMEBLOCK® LP® FLAMEBLOCK® 2-HOUR EITHER SIDE 2.3" BRICK 2x4 STUDS AT 16" O.C. 2-SIDED SHEATHING SHEATHING 2x6 STUDS AT 24" O.C. LP® FLAMEBLOCK® *Staggered studs and resilient SHEATHING channel required for STC=61, 5/8" TYPE X FIRERGI ASS not required for fire resistance **U349** GYPSUM INSULATION 5/8" TYPE X GYPSUM 5/8" TYPE X 2-HOUR INTERIOR GYPSUM 1-HOUR EXTERIOR *RESILIENT 2x4 STUDS *RESILIENT CHANNEL AT 16" O.C. CHANNEL 5/8" EXTERIOR 2x4 STUDS AT 16" O.C.

2-HOUR INTERIOR, 1-HOUR EXTERIOR

W408

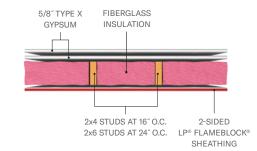
2-HOUR INTERIOR 1-HOUR EXTERIOR



2-HOUR INTERIOR ONLY

U349

2-HOUR INTERIOR



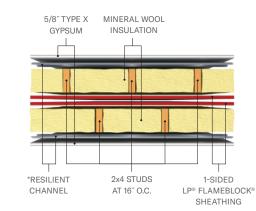
TWO 1-HOUR WALLS

V340

2x6 STUDS AT 24" O.C. LP® FLAMEBLOCK®

SHEATHING

TWO 1-HOUR WALLS LOAD RESTRICTED TO 40% STUD CAPACITY



ASSEMBLIES

STEEL STUDS

• Reference the UL listings for alternate configurations and additional information.

5/8" TYPE X MINERAL WOOL

INSULATION

3-1/2" STEEL STUDS

5/8" TYPE X MINERAL WOOL

AT 24" O.C.

INSULATION

GYPSUM

3.4" BRICK

GYPSUM

• The use of 2-sided LP® FlameBlock® sheathing may be required by the building Construction Type. Reference section 4.2 in ICC-ES ESR 1365 for additional information not shown.

2-SIDED

LP® FLAMEBLOCK®

SHEATHING

2-SIDED

SHEATHING

LP® FLAMEBLOCK®

1-HOUR EITHER SIDE 5/8" TYPE X MINERAL WOOL **U348** GYPSUM 1-HOUR EITHER SIDE 2.3" BRICK 3-1/2" STEEL STUDS 1-SIDED LP® FLAMEBLOCK® AT 24" O.C. SHEATHING 5/8" TYPE X MINERAL WOOL **U348** GYPSUM INSULATION 1-HOUR EITHER SIDE 3-1/2" STEEL STUDS 3/4" STUCCO 1-SIDED LP® FLAMEBLOCK® AT 24" O.C. SHEATHING 5/8" TYPE X MINERAL WOOL **U348** INSULATION GYPSUM 1-HOUR EITHER SIDE 3-1/2" STEEL STUDS 5/8" EXTERIOR 1-SIDED LP® FLAMEBLOCK® GYPSUM AT 24" O.C. SHEATHING 5/8" TYPE X MINERAL WOOL **V337** INSULATION 1-HOUR EITHER SIDE LOAD RESTRICTED TO 73% STUD CAPACITY 3-1/2" STEEL STUDS 2-SIDED AT 16" O.C. LP® FLAMEBLOCK® SHEATHING 1-HOUR INTERIOR ONLY MINERAL WOOL **U348** GYPSUM INSULATION 1-HOUR INTERIOR RESISTANCE ONLY

3-1/2" STEEL STUDS

AT 24" O.C.

LP® FLAMEBLOCK®

SHEATHING

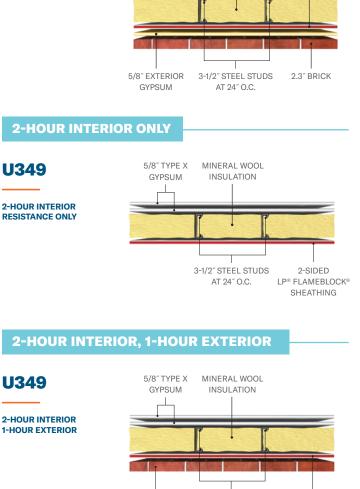
2-HOUR EITHER SIDE 5/8" TYPE X MINERAL WOOL **V337** INSULATION GYPSUM 2-HOUR EITHER SIDE LOAD RESTRICTED TO 73% STUD CAPACITY 5/8" EXTERIOR 3-1/2" STEEL STUDS 2-SIDED GYPSUM AT 16" O.C. LP® FLAMEBLOCK® SHEATHING MINERAL WOOL 2-SIDED **V337** LP® FLAMEBLOCK® SHEATHING 2-HOUR EITHER SIDE LOAD RESTRICTED TO 73% STUD CAPACITY 2x6 STEEL STUDS 5/8" EXTERIOR 2-SIDED MINIMUM LP® FLAMEBLOCK® GYPSUM MINERAL WOOL **V337** 5/8" TYPE X **GYPSUM** INSULATION 2-HOUR EITHER SIDE 73% STUD CAPACITY 3-1/2" STEEL STUDS 3/4" STUCCO AT 16" O.C. LP® FLAMEBLOCK® SHEATHING MINERAL WOOL 5/8" TYPF X **V337** GYPSUM INSULATION 2-HOUR EITHER SIDE LOAD RESTRICTED TO 73% STUD CAPACITY 2.3" BRICK 3-1/2" STEEL STUDS 2-SIDED

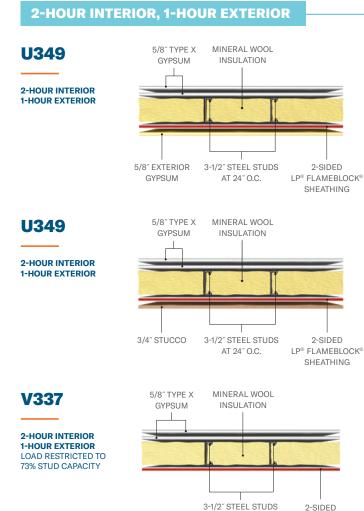
AT 16" O.C.

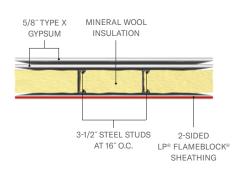
LP® FLAMEBLOCK®

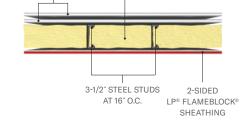
SHEATHING

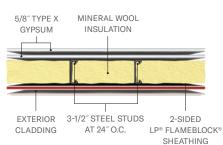
2-HOUR EITHER SIDE 2-HOUR EITHER SIDE









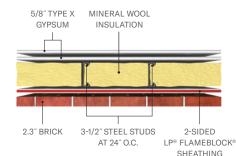


2-HOUR INTERIOR

2-HOUR EITHER SIDE

U349

U349



W408

2-HOUR INTERIOR

1-HOUR EXTERIOR



Find all LP® FlameBlock® product literature at

LPCORP.COM/FLAMEBLOCK



AWARNING: Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. For more information, go to www.P65Warnings.ca.gov/wood.