

Fire-resistance rated construction designs are required in some residential single-family home, multi-family structures (aka MDU or Multi-dwelling units), and most commercial building applications to separate adjacent spaces, safeguarding against the spread of fire to, within, or from other buildings. The use of foam plastics including spray polyurethane foam (SPF) in these designs requires specific testing and compliance to be utilized in a code-compliant manner. This is specifically called out in Chapter 26 of the International Building Code (IBC), and Section R316 of the International Residential Code (IRC).

The fire resistance rating is the amount of time an assembly or component maintains the ability to withstand fire exposure. BASF holds a variety of fire-resistance rated assemblies with times ranging from 45-min to 4-hours in the Underwriters Laboratories (UL) Directory – **there are a total of 25 UL-rated wall assemblies and 16 floor-ceiling assemblies listed for BASF, as outlined on the following tables.**

Per the Underwriters Laboratories general information for fire-resistance ratings - ANSI / UL263 (ASTM E119):

- “This category covers fire-rating certifications based upon the test method and acceptance criteria in ANSI/UL 263 (ASTM E119), "Fire Tests of Building Construction and Materials." The ratings are expressed in hours and are applicable to floor-ceilings, roof-ceilings, beams, columns, walls and partitions. When a test assembly complies with the acceptance criteria, a detailed description of the assembly, its performance in the fire test, and other pertinent details such as specification of materials, certification coverage and alternate assembly details, are included in a Report for the test sponsor. Sponsors may provide copies of the complete Test Report upon request. The Report also contains a summary of important features of the rated assembly. These summaries are also published in the UL Directory. Variations from the published specifications should be considered as not being investigated by UL.”

The full listing and UL certification details for all BASF Corporation SPF systems can be found at this [UL Directory Link](#). Search for “CCVW” under the UL Category Code and “R9865” under the UL File Number to find the complete list and details. On the following pages of this document, you will find useful summary tables, showing broad categories of approvals for multiple products.

The currently available BASF spray polyurethane foam insulation products, tested in various UL-rated assemblies, include:

- WALLTITE® Series - Closed-cell, medium density, low-global warming potential insulating air barrier materials:
  - WALLTITE Max - US formula for residential and commercial construction with NFPA 285 assembly approvals
  - WALLTITE LWP - US formula for residential and commercial construction with NFPA 285 assembly approvals
  - WALLTITE V.5 - Canada formula for residential / commercial construction with CAN/ULC-S134
- ENERTITE® Series - Open-cell, ½ pound per cubic foot insulation systems:
  - ENERTITE G – No-mix resin, high-yield open-cell foam system with GREENGUARD GOLD approvals
  - ENERTITE Max – Mixed resin, high-yield open-cell foam system with GREENGUARD GOLD approvals

There are some specific and critical distinctions about these credentials, including:

- Approvals for fire resistance (ANSI /UL263 or ASTM E119) do not provide approvals for NFPA 285.
  - NFPA 285 testing and credentials are separate and additional IBC fire test requirements for SPF used in commercial applications.
- Approvals for "symmetrical" fire exposure are acceptable for demising/partition walls between units, e.g. between apartments (aka “party walls”).
- For exterior walls, often the fire resistance rating is required from an Interior Exposure, but the ultimate requirements are determined by many characteristics of the building.

Additional information about BASF products and code compliance is found in BASF ICC-ESRs and Intertek CCRRs.

The tables below summarize the high points of the BASF assemblies, with UL design numbers and links for easy reference (UL Prospector login required):

Updated: 10/01/2024

UL Directory - ANSI / UL263 (ASTM E119)

Wood Stud Assembly #	Currently Available BASF Systems Approved	Load Bearing or Non-Load Bearing	Fire Rating	Fire Exposure	SPF Location
<a href="#">U301</a>	EnerTite® G, EnerTite® Max Walltite® Max, Walltite® LWP, Walltite® V.5	Bearing	2 hr	Symmetrical	Stud Cavity
<a href="#">U305</a>	EnerTite® G, EnerTite® Max Walltite® Max, Walltite® LWP, Walltite® V.5	Bearing	1 hr	Symmetrical	Stud Cavity
<a href="#">W307</a>	EnerTite® G, EnerTite® Max Walltite® Max, Walltite® LWP, Walltite® V.5	Bearing	1 hr to 2 hr	Symmetrical	Stud Cavity
<a href="#">U397</a>	EnerTite® G, EnerTite® Max Walltite® Max, Walltite® LWP, Walltite® V.5	Bearing or Non-Bearing	1 hr	Asymmetrical	Exterior or Stud Cavity
<a href="#">V313</a>	EnerTite® G, EnerTite® Max Walltite® Max, Walltite® LWP, Walltite® V.5	Bearing or Non-Bearing	1 hr	Asymmetrical	Stud Cavity
Partition (Wood Stud) Wall Assembly #	Currently Available BASF Systems Approved	Load Bearing or Non-Load Bearing	Fire Rating	Fire Exposure	SPF Location
<a href="#">V324</a>	EnerTite® G, EnerTite® Max	Bearing or Non-Bearing	2 hr	Symmetrical	Stud Cavity
<a href="#">V342</a>	EnerTite® G, EnerTite® Max	Bearing or Non-Bearing	2 hr	Symmetrical	Stud Cavity
<a href="#">V352</a>	EnerTite® G, EnerTite® Max	Bearing or Non-Bearing	2 hr	Symmetrical	Stud Cavity
Steel Stud Assembly #	Currently Available BASF Systems Approved	Load Bearing or Non-Load Bearing	Fire Rating	Fire Exposure	SPF Location
<a href="#">U411</a>	EnerTite® G, EnerTite® Max Walltite® Max, Walltite® LWP, Walltite® V.5	Non-Bearing	2 hr	Symmetrical	Stud Cavity
<a href="#">U419</a>	EnerTite® G, EnerTite® Max Walltite® Max, Walltite® LWP, Walltite® V.5	Non-Bearing	1 hr to 4 hr	Symmetrical	Stud Cavity
<a href="#">U423</a>	EnerTite® G, EnerTite® Max Walltite® Max, Walltite® LWP, Walltite® V.5	Bearing	3/4 hr to 2 hr	Symmetrical	Stud Cavity
<a href="#">U424</a>	EnerTite® G, EnerTite® Max Walltite® Max, Walltite® LWP, Walltite® V.5	Bearing or Non-Bearing	3/4 hr to 2 hr	Asymmetrical	Exterior or Stud Cavity
<a href="#">U460</a>	EnerTite® G, EnerTite® Max Walltite® Max, Walltite® LWP, Walltite® V.5	Bearing	1 hr	Asymmetrical	Exterior
<a href="#">U465</a>	EnerTite® G, EnerTite® Max Walltite® Max, Walltite® LWP, Walltite® V.5	Non-Bearing	1 hr	Symmetrical	Stud Cavity
<a href="#">U4103</a>	EnerTite® G, EnerTite® Max Walltite® Max, Walltite® LWP, Walltite® V.5	Non-Bearing	1 to 4 hr	Symmetrical	Stud Cavity
<a href="#">V499</a>	EnerTite® G, EnerTite® Max Walltite® Max, Walltite® LWP, Walltite® V.5	Bearing or Non-Bearing	3/4 hr to 2 hr	Asymmetrical	Exterior or Stud Cavity
<a href="#">W496</a>	EnerTite® G, EnerTite® Max Walltite® Max, Walltite® LWP, Walltite® V.5	Bearing	3/4 hr to 2 hr	Symmetrical	Stud Cavity
Precast Assembly #	Currently Available BASF Systems Approved	Load Bearing or Non-Load Bearing	Fire Rating	Fire Exposure	SPF Location
<a href="#">W481</a>	EnerTite® G, EnerTite® Max Walltite® Max, Walltite® LWP, Walltite® V.5	Non-Bearing	1 and 2 hr	Asymmetrical	Precast Panel
Masonry (Brick & Precast) Assembly #	Currently Available BASF Systems Approved	Load Bearing or Non-Load Bearing	Fire Rating	Fire Exposure	SPF Location
<a href="#">U902</a>	EnerTite® G, EnerTite® Max Walltite® Max, Walltite® LWP, Walltite® V.5	Bearing	4 hr	Asymmetrical	Masonry Cavity
Wood Studs with Brick Veneer Assembly #	Currently Available BASF Systems Approved	Load Bearing or Non-Load Bearing	Fire Rating	Fire Exposure	SPF Location
<a href="#">V306</a>	EnerTite® G, EnerTite® Max Walltite® Max, Walltite® LWP, Walltite® V.5	Bearing or Non-Bearing	1 hr	Asymmetrical	Stud Cavity

Any technical advice furnished or recommendation made by the authors concerning any use or application of any product is believed to be reliable, but the authors make no warranty, either express or implied, as to its accuracy or completeness or of the results to be obtained. With regard to any handling of any BASF product, the end user assumes full responsibility for quality control, testing and determination of suitability of product for its intended application or use.

For any additional information about BASF spray foam systems, please visit [www.spf.basf.com](http://www.spf.basf.com)  
For a referral to an applicator in your area or to speak with a technical sales representative, please call 800-706-0712 x2.

**BASF Corporation- Inside Technical Support**  
1703 Crosspoint Avenue Houston, TX 77054  
Tel: (Toll Free) 800-706-0712 – Option 2  
[www.spf.basf.com](http://www.spf.basf.com)

Rev 10.04.24

Steel Studs with Brick Veneer Assembly #	Currently Available BASF Systems Approved	Load Bearing or Non-Load Bearing	Fire Rating	Fire Exposure	SPF Location
<a href="#">U425</a>	Enercite® G, Enercite® Max Walltite® Max, Walltite® LWP, Walltite® V.5	Bearing	3/4 hr to 2 hr	Both Options	Exterior
<a href="#">V454</a>	Enercite® G, Enercite® Max Walltite® Max, Walltite® LWP, Walltite® V.5	Bearing or Non-Bearing	1 hr	Asymmetrical	Stud Cavity
<a href="#">V495</a>	Enercite® G, Enercite® Max Walltite® Max, Walltite® LWP, Walltite® V.5	Non-Bearing	3 hr	Asymmetrical	Stud Cavity or Masonry Cavity
<a href="#">W417</a>	Enercite® G, Enercite® Max Walltite® Max, Walltite® LWP, Walltite® V.5	Non-Bearing	1 hr	Asymmetrical	Stud Cavity
<a href="#">W421</a>	Enercite® G, Enercite® Max Walltite® Max, Walltite® LWP, Walltite® V.5	Non-Bearing	1 hr	Asymmetrical	Stud Cavity
<a href="#">W444</a>	Enercite® G, Enercite® Max Walltite® Max, Walltite® LWP, Walltite® V.5	Non-Bearing	1 hr	Asymmetrical	Stud Cavity

Floor/Ceiling Assembly #	Currently Available BASF Systems Approved	Fire Rating	SPF Location
<a href="#">L521</a>	Enercite® G, Enercite® Max Walltite® Max, Walltite® LWP, Walltite® V.5	1 hr	Underside of the plywood subflooring
<a href="#">L528</a>			
<a href="#">L550</a>			
<a href="#">L574</a>			
<a href="#">L587</a>			
<a href="#">M540</a>			
<a href="#">M562</a>			
<a href="#">P522</a>	Enercite® G, Enercite® Max Walltite® Max, Walltite® LWP, Walltite® V.5	1 hr	Underside of the roofing system
<a href="#">P531</a>			
<a href="#">P533</a>			
<a href="#">P538</a>			
<a href="#">P545</a>			
<a href="#">P552</a>			
<a href="#">P556</a>			
<a href="#">P579</a>			
<a href="#">P580</a>			

Any technical advice furnished or recommendation made by the authors concerning any use or application of any product is believed to be reliable, but the authors make no warranty, either express or implied, as to its accuracy or completeness or of the results to be obtained. With regard to any handling of any BASF product, the end user assumes full responsibility for quality control, testing and determination of suitability of product for its intended application or use.

For any additional information about BASF spray foam systems, please visit [www.spf.basf.com](http://www.spf.basf.com)  
 For a referral to an applicator in your area or to speak with a technical sales representative, please call 800-706-0712 x2.

**BASF Corporation- Inside Technical Support**  
 1703 Crosspoint Avenue Houston, TX 77054  
 Tel: (Toll Free) 800-706-0712 – Option 2  
[www.spf.basf.com](http://www.spf.basf.com)