

July 15th, 2024

#### **Guidance Documentation for LEED v4.1**

BASF Canada (BASF) WALLTITE® v.5 Spray Polyurethane Foam (SPF) Insulation

## **MATERIALS AND RESOURCES**

#### **Environmental Product Declaration**

### **Option 1. Environmental Product Declaration (EPD)**

Industry-wide Type III EPD available for SPF via the Spray Polyurethane Foam Alliance – Products with third-party certification (Type III), including external verification, in which the manufacturer is explicitly recognized as a participant by the program operator, valued as one whole product for the purposes of credit achievement calculation.

#### ASTM EPD-070

https://pcr-epd.s3.us-east-2.amazonaws.com/451.EPD for SPFA EPD 20181029 HFO excl 2K-LP.pdf

### SPF Life Cycle Assessment

https://www.sprayfoam.org/files/SPFA EPD%20Background%20Report%2020181029 signed(1).pdf

### **Additional Information on Materials Sources**

Spray applied polyurethane foam insulation is considered to be manufactured on site because the final product is not manufactured at a factory. The resin and isocyanate components of the product are shipped to the construction site where they are combined at an approximate 1 to 1 ratio to make **WALLTITE® v.5** polyurethane foam insulation.

The isocyanate is manufactured in Louisiana, US and can be shipped by train to BASF facilities in Cornwall (ON), Blackie (AB), and Wyandotte (MI) and then shipped by tanker truck to our insulation contractors. The isocyanate is also shipped in drums by truck directly to our customers in Canada. The resin used to make **WALLTITE® v.5** contains the following materials:

- Polyols: more than 70% of the resin, shipped via tanker truck from Texas.
- Blowing agent: more than 10% of the resin, shipped via tanker truck from Illinois.
- Fire retardant: less than 20% of the resin, shipped in bulk by truck from West Virginia.
- Catalysts and surfactants: remaining difference, shipped in drums from New Jersey.

### **ENERGY & ATMOSPHERE**

# **Optimize Energy Performance**

BASF's **WALLTITE® v.5** has a Long-Term Thermal Resistance (LTTR) value of 5.6 per inch. Additional thermal performance has been documented through studies and with the use of calculators and modeling that demonstrates additional energy savings with additional SPF thicknesses and as the product is seamless and self-adhered forming an air seal without thermal breaks.

# INDOOR ENVIRONMENTAL QUALITY

# **Low Emitting Materials**

Building products must be tested and determined compliant in accordance with California Department of Public Health (CDPH) Standard Method v1.2-2017 and complies with the VOC limits. BASF's **WALLTITE® v.5** has 0 g/L emissions and meets the requirements of CA Section 01350 for VOC emissions and formaldehyde (information can be found on the Safety Data Sheet). BASF's **WALLTITE® v.5** has a TVOC of 0.5 mg/m³ or less.

#### **Thermal Comfort**

BASF's **WALLTITE**® **v.5** allows the building envelope to be designed in such a way as to provide a thermally comfortable environment that supports the productivity and well-being of occupants.