

# **Application Guidelines**

# WALLTITE® CM01 – CCMC 14100-L

# Guidelines for WALLTITE CM01 Insulation / Air Barrier Material

WALLTITE CM01 is a medium density polyurethane foam insulation/air barrier material. WALLTITE CM01 produces an insulation/air barrier by the chemical reaction between an isocyanate and a resin. When these materials are combined in the spray gun's mixing chamber, a chemical reaction occurs, releasing heat. This heat or exothermic reaction causes the blowing agent to create foam expansion. The final cured product is purple with indicator dye technology.

WALLTITE CM01 comes in three reactivity grades: WALLTITE CM01 Regular, Fast (F) and Cold Temperature (CT). Unless specified, all references to WALLTITE CM01 in this document refer to all three grades of WALLTITE CM01.

#### **CERTIFIED CONTRACTORS ONLY**

Installation of WALLTITE CM01 requires special equipment and training. Only individuals trained and certified through the BASF Canada Quality Assurance Training Program (QATP) can install WALLTITE CM01.

These Application Guidelines are for general reference only. Qualified individuals must be familiar with the CAN/ULC S705.2 application standard and the QATP Program Manual. For any questions regarding how to properly apply WALLTITE CM01 please refer to the CAN/ULC S705.2 application standard and the QATP Program Manual. To speak to BASF regarding WALLTITE CM01, call 1-866-474-3538.

## **PROPER APPLICATION**

#### **Weather and Environmental Conditions**

Before beginning an application, ensure the surrounding environment meets the following conditions:

Wind	When applying outdoors, wind speed must not be higher than 15km/h (9.3
	mph) unless windscreens are used.
Humidity	Care should be taken whenever the relative humidity (RH) is greater than
	80%. High RH could cause blistering problems and weaken foam adhesion.
Temperature	Reactivity is dependent on ambient and substrate temperatures. The
	following grades are recommended for each temperature range:
WALLTITE CM01	5°C to 40°C (41°F to 104°F)
WALLTITE CM01 F	5°C to 40°C (41°F to 104°F)
WALLTITE CM01 CT	-15°C to 10°C (5°F to 50°F)

### **Substrate Service Temperature**

Before beginning an application, ensure the continuous substrate temperature onto which WALLTITE CM01 is to be applied always remains within the following range:

-60°C to 80°C (-76°F to 176°F)





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#### **Substrate Preparation**

Prior to beginning application, determine if the substrate can be used with WALLTITE CM01 by conducting an adhesion test in accordance with CAN/ULC application standard S705.2.

All substrates to be sprayed must be free of:

- Frost;
- Dew:
- Moisture;
- Dust;
- Oil:
- Grease;
- · Oxidization (rust); and
- Any other element that may affect how the product adheres to the surface.

Metal surfaces require the application of a primer and may require sandblasting prior to priming. Other surfaces may require additional preparation – pay special attention to substrates with high moisture content (concrete less than 28 days old, and wood with moisture content over 19%, etc.). See the CAN/ULC standard S705.2 and the QATP Manual for further information.

#### **Pass Thickness**

The heat created by the exothermic reaction during application creates a risk of scorching and/or fire. This risk increases with pass thickness.

WALLTITE CM01 must be applied to a minimum of 15mm (½") pass thickness and, to avoid the risk of scorching and/or fire, to a <u>maximum</u> of 50mm (2") pass thickness. Pay close attention to areas where thick pockets of WALLTITE CM01 may develop during application, such as rim joists, header spaces, exterior wall corners, small stud spaces, and wall intersections, to ensure that no section of a pass exceeds 50mm (2").

If you spray a pass in excess of 50mm (2") you must immediately remove the WALLTITE CM01 from the substrate using a non-flammable tool such as a crowbar – do <u>not</u> use your hands. After removal, break up large pieces of WALLTITE CM01 on a non-flammable surface using the non-flammable tool.

## **Multiple Passes**

After spraying a pass, cooling time <u>must</u> be allowed for the dissipation of heat. Not allowing adequate cooling time raises the risk of scorching and/or fire.

**WALLTITE CM01 regular and F grades**: A period of 3 to 5 minutes is required before applying a second pass of WALLTITE CM01. If a third layer is required to bring the depth to more than 101.6mm (4") total thickness, there must be a cooling period of at least 30 minutes between the second and third pass before spraying additional passes. Maximum R 60 can be installed in an 8-hour period, depending on site conditions.

**WALLTITE CM01 CT:** Allow the surface of the first pass (2") to cool to ambient temperature (30 minutes minimum) before applying the second pass (maximum 2"). If a third layer is required to bring the depth to more than 101.6mm (4"), a cooling period of at least 1 hour is necessary before spraying additional passes. Maximum R 60 can be installed in an 8-hour period, depending on site conditions.

# HOW TO SPRAY WALLTITE CM01, WALLTITE CM01 F and WALLTITE CM01 CT

The following equipment settings are recommended:

- Hose heat and primary heater temperature of 32°C-49°C (90°F-120°F)
- Dispensing pressure of 59-83 bar (850-1200psi).
- Start with a hose heat of 46°C (115°F) and a dispensing pressure of 69 bar (1000psi). Make adjustments to those settings in small increments (+/- 3°C (5°F), +/- 7 bar (100 psi)).
- Check the reactivity, density, spray pattern, mix quality, and foam cell quality by test spraying onto a disposable piece of substrate.
- Hold the spray gun perpendicular from 0.3 to 0.9 meters (1-3 feet) from the substrate. Arm movement, extension and stretching should be minimized while spraying.
- The thickness of a pass depends on the speed of the arm movement while spraying. Smooth, steady movements ensure proper application and uniform density.

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## **HOW TO SPRAY WALLTITE CM01 CT**

- WALLTITE CM01 CT must be applied the same way as WALLTITE CM01, with the following important additional instructions.
- Begin spraying in the corners or at the wall-ceiling intersection points. Apply foam in a 0.6-0.9 meter (2-3 feet) wide section and leave a space 0.3-0.6 meters (1-2 feet) wide between the first section and the additional sections. Continue spraying 3-5 meter (10-15 feet) wide sections, leaving 0.3-0.6 meter (1-2 feet) wide spaces between sections. Finish spraying with a 0.6-0.9 meter (2-3 feet) wide section at the next intersection point.
- Allow the foam surface to cool to room temperature before filling in the 0.3-0.6-meter (1-2 feet) spaces left between the sprayed sections.

For detailed spray instructions, refer to the QATP Manual.

DAILY WORK SHEETS MUST BE COMPLETED AT THE END OF EVERY DAY.

#### **TECHNICAL ASSISTANCE**

For more detailed information, call:

Toll- Free: 1-866-474-3538

BASF Canada Inc.: www.walltite.com

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