DuPont™ Thermax™ Wall System

Overview

Description
The DuPont™ Thermax™ Wall System is more than an insulated wall – it’s a systematic approach to achieving efficiency at every level: simplified design, streamlined construction and optimized energy consumption for a reduced carbon footprint. DuPont’s four-in-one system with DuPont™ Thermax™ XARMOR™ (ci) or Thermax™ Sheathing Exterior Insulation, LiquidArmor™ Flashing and Sealant, available in acrylic sprayable formula (CM and QS) and trowel-able silicone formulation (LT), and approved spray polyurethane foam (optional), meets all applicable IBC and ASHRAE requirements for continuous insulation, moisture mitigation, air sealing, and vapor barriers. This complete system eliminates the need for exterior gypsum sheathing, applied air/vapor barrier membranes, and extensive site coordination, making it both cost effective and easy to install.

Steel transfers heat amazingly fast – up to 300 times faster than wood studs and reduces the effective R-value of metal stud wall designs by 40–60%. The ASHRAE prescriptive continuous insulation requirements for steel-framed, above-grade walls recognize this phenomenon, and in most climate zones, call for a layer of continuous insulation (ci) to be added to the assembly to help stop the steel thermal shorts that can decrease the energy efficiency of the wall system.
To meet the continuous insulation code it’s critical to also account for condensation within the wall assembly. Even if a wall is adequately designed to prevent liquid water from entering the assembly, condensation can still occur as a result of the interior and exterior temperatures as well as relative humidity.

There are 4 control layers that make up a high performance wall assembly. They are: thermal, water, air, & vapor control layers. The DuPont™ Thermax™ Wall System is designed to incorporate all of these control layers while simplifying the installation process and providing high effective R-value, all of the necessary components of a high-performing wall system.

| Thermal Layer | ASTM C518, R-value | DuPont™ Thermax™ Brand Insulation |
| Water-Resistive Layer | ASTM E331: Pass – No water penetration during 2 hours of pressurized testing. |
| Air Sealing Layer | ASTM E2357: @ 5/8” thick Thermax™ XARMOR® (ci) with LiquidArmor® Flashing & Sealant as joint treatment Code: 0.04 cfm / ft² Tested: 0.01 cfm / ft² Improvement over code: 250% |
| Vapor Retarding Layer | ASTM E96, perms | <0.1% Class 1 Retarder (Vapor Impermeable) |
| | ABAA | Evaluated System |

Thermax™ products should be used only in strict accordance with product application instructions. Thermax™ products, when used in a building containing combustible materials, may contribute to the spread of fire.

NOTICE: No freedom from any patent owned by DuPont or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer’s use and for ensuring that Customer’s workplace and disposal practices are in compliance with applicable laws and other government enactments. The product shown in this literature may not be available for sale and/or available in all geographies where DuPont is represented. The claims made may not have been approved for use in all countries or regions. DuPont assumes no obligation or liability for the information in this document. References to “DuPont” or the “Company” mean the DuPont legal entity selling the products to Customer unless otherwise expressly noted. NO EXPRESS WARRANTIES ARE GIVEN EXCEPT FOR ANY APPLICABLE WRITTEN WARRANTIES SPECIFICALLY PROVIDED BY DUPONT. ALL IMPLIED WARRANTIES INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED. The buyer assumes all risks as to the use of the material. Buyer’s exclusive remedy or any claim (including without limitations, negligence, strict liability, or tort) shall be limited to the refund of the purchase price of the material. Failure to strictly adhere to any recommended procedures shall release DuPont Specialty Products USA, LLC or its affiliates, of all liability with respect to the materials or the use thereof. The information herein is not intended for use by non-professional designers, applicators or other persons who do not purchase or utilize this product in the normal course of their business.

Thermax™ products are combustible and will burn if exposed to open flame or sparks from high-energy sources. Do not expose to temperatures above 240°F (116°C). For more information, consult (Material) Safety Data Sheet (MDSDF) call DuPont at 1-866-583-BLUE (2583) or contact your local building inspector. In an emergency, call 1-989-636-4400 in the U.S. or 1-519-339-3711 in Canada. When air sealing buildings, ensure that combustion appliances, such as furnaces, water heaters, wood burning stoves, gas stoves and gas dryers are properly vented to the outside. See website: http://www.epa.gov/iaq/homes/hp-ventilation.html. In Canada visit: http://archive.nrc-cnrc.gc.ca/eng/ibp/irc/bsi/83-house-ventilation.html.

Notice: LiquidArmor™ - CM bridges up to 1/4” gaps without the need of mesh or a backer rod. Larger gaps may need the addition of common backer rods. Read all instructions and (Material) Safety Data Sheets carefully before use. It is recommended that spray applicators and those working in the spray area wear eye protection. Contact with exposed skin may cause skin discoloration and dryness. Gloves are recommended for prolonged exposure. Ensure adequate ventilation during spray applications.

CAUTION: When cured, these products are combustible and will burn if exposed to open flame or sparks from high-energy sources. Do not expose to temperatures above 240°F (116°C). For more information, consult (Material) Safety Data Sheet (MDSDF) call DuPont at 1-866-583-BLUE (2583) or contact your local building inspector. In an emergency, call 1-989-636-4400 in the U.S. or 1-519-339-3711 in Canada. When air sealing buildings, ensure that combustion appliances, such as furnaces, water heaters, wood burning stoves, gas stoves and gas dryers are properly vented to the outside. See website: http://www.epa.gov/iaq/homes/hp-ventilation.html. In Canada visit: http://archive.nrc-cnrc.gc.ca/eng/ibp/irc/bsi/83-house-ventilation.html.

WARNING: Rigid foam insulation does not constitute a working surface or qualify as a fail protection product.

For more information visit us at thermaxwallsystem.com or call 1-866-583-2583

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