

# DuPont™ Thermax™ Wall System

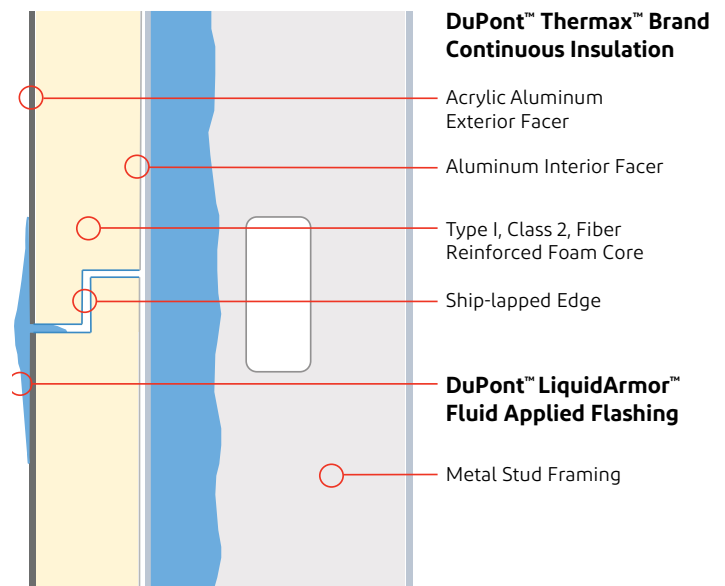
## Overview



### 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.



<b>Thermal Layer</b>	
ASTM C518, R-value	DuPont™ Thermax™ Brand Insulation
<b>Water-Resistive Layer</b>	
ASTM E331:	Pass – No water penetration during 2 hours of pressurized testing.
ASTM C209 Water Absorption, % by volume, max	Thermax™ Brand Insulation: 0.1
<b>Air Sealing Layer</b>	
ASTM E2357:	
@ 5/8" thick Thermax™ XARMOR (ci) with LiquidArmor™ Flashing & Sealant as joint treatment	Code: 0.04 cfm / ft <sup>2</sup> Tested: 0.01 cfm / ft <sup>2</sup> Improvement over code: 250%
ABAA	Evaluated System
<b>Vapor Retarding Layer</b>	
ASTM E96, perms	<0.1= Class 1 Retarder (Vapor Impermeable)

ASTM D2126 Dimensional Stability	0.11% movement (<1/8" per 8' board)
Back up Applications	Steel Stud
NFPA-285 Approval	Passed (See Engineering Judgement Report)
ASTM E84, (Burning Characteristics)	Thermax™ Brand Insulation: Flames Spread: <25 (Class A), Smoke: <450 for foam core AND finished product"
Intertek Fire Rating Listing	FI 60-02, FI 60-01, FI 120-01
Joint Treatments	DuPont™ LiquidArmor™ Flashing and Sealant, available in acrylic sprayable formula (CM and QS) and trowel-able silicone formulation (LT)
Edge Treatment	Square edge (5/8" & 1") Ship-lapped (1.55" or greater)
Facer Technology	<b>Thermax™ XARMOR™:</b> 4 mil gray embossed acrylic coated aluminum front, 1.25 embossed aluminum back  <b>Thermax™ Sheathing:</b> 1 mil smooth aluminum front, 1 mil smooth aluminum back
Warranty	<b>GOLD (Thermax™ XARMOR™ (ci) with LiquidArmor™:</b> 15 year water, 15 year thermal, 6 month UV  <b>SILVER (Thermax™ (ci) with LiquidArmor™):</b> 10 year water, 15 year thermal, 6 month UV  <b>BRONZE (Thermax™ Sheathing with LiquidArmor™):</b> 5 year water, 15 year thermal, 6 month UV
LEED Points (v4)	EA Credit: 1–19 points MR Credit 2: 1–2 points MR Credit 3.1 & 3.2: 1–2 points MR Credit 4.1 & 4.2: 1–2 points MR Credit 5.1 & 5.2: 1–2 points EQ Credit 2: 1 point EQ Credit 7.1: 1 point

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.



**For more information visit us at [thermaxwallsystem.com](http://thermaxwallsystem.com) or call 1-866-583-2583**

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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.

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. LiquidArmor™ - CM is a combustible material. Ensure product application complies with local building codes.

**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 call the DuPont Contact Center at 866-583-2583 or contact your local building inspector. For emergencies contact Chemtrec 800-424-9300, CCN (Contract Number) 7442. 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/hip-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 walkable surface or qualify as a fall protection product.

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