

# EnergyShield® CGF NH

## Continuous Wall Insulation



**DESCRIPTION:** Atlas EnergyShield® CGF NH is composed of a closed cell non-halogenated polyisocyanurate (polyiso) foam core, faced with a non-reflective coated glass-mat facer on both sides. The blowing agent used to produce the polyiso foam core does not contain any CFCs, HCFCs or HFCs. EnergyShield® CGF NH has zero Ozone Depletion Potential (ODP) and negligible Global Warming Potential (GWP). Atlas EnergyShield® CGF NH combines high R-value, enhanced durability from two coated glass-mat facers, and water resistive attributes in a high performance rigid wall insulation. EnergyShield® CGF NH is suitable for a variety of continuous insulation (CI) applications. This product has been validated by UL Environment as resistant to mold growth based on independent testing to UL 2824.

Panel sizes are 4' by 8' or 4' by 9'. Panels can be supplied in nominal 16" and 24" widths for use in masonry cavity wall applications. Custom sizes are also available.

**APPLICATION:** EnergyShield® CGF NH is recommended for use in residential applications as well as some commercial construction applications, check local building codes for compliance. The coated glass-mat facers enhance the product's durability and are more permeable than foil facers.

Common applications include:

- Exterior or interior rigid insulation (interior application requires a thermal barrier) for walls framed with wood or steel studs
- Exterior or interior continuous insulation (CI) for masonry or concrete wall systems, including exterior masonry cavities
- Exterior continuous insulation (CI) over wood or gypsum sheathings
- Use over existing cladding to improve energy efficiency with continuous insulation (CI) and provide a level surface prior to installing a new cladding
- Approved of use in attics and crawlspaces without requiring the use of a thermal barrier (ICC-ES A12, Appendix B)
- Knee wall and vaulted ceiling applications (with an approved thermal barrier)
- Insulation for use in precast, tilt-up and cast-in-place insulated concrete wall panels
- Under slab insulation
- Various OEM applications

### ENERGYSHIELD® CGF NH MEETS OR EXCEEDS THE FOLLOWING PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	TEST METHOD MINIMUM REQUIREMENTS
FLAME SPREAD	ASTM E84	< 75
SMOKE DEVELOPMENT	ASTM E84	< 450
MOISTURE VAPOR TRANSMISSION (ASTM E96 DESICCANT METHOD)	ASTM E96	1.2 Perm at 1-inch
WATER ABSORPTION	ASTM C209	< 1% by Volume *Typical Results < 0.5% by Volume
DIMENSIONAL STABILITY	ASTM D2126	< 2% Linear Change *Typical Results < 1% Linear Change
SERVICE TEMPERATURES	-	-100°F to +250°F (-73°C to 122°C)

### THERMAL DATA

R-VALUE <sup>1,2</sup>	NOMINAL BOARD THICKNESS <sup>3</sup>
3.0	0.5"
4.5	0.75"
6.0	1.0"
9.0	1.5"
12.1	2.0"
15.3	2.5"
18.5	3.0"
21.7	3.5"
25	4"

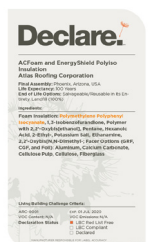
<sup>1</sup> Conditioned thermal values were determined by ASTM Test Method C 518 at 75° mean temperature. Test specimens were conditioned in accordance with procedures outlined in ASTM C1289, Section 11.1.2.1.

<sup>2</sup> "R" means resistance to heat flow. The higher the R-value, the greater the insulating power.

<sup>3</sup> Other sizes available upon request. Contact your local Atlas sales office.

### CODES AND COMPLIANCES

- **ASTM C1289 Type II, Class 2**
- **ASTM E84 Flame Spread**, less than 75
- **ASTM E84 Smoke Development**, less than 450
- **International Building Code (IBC)**, Section 2603
- **International Residential Code (IRC)**, Section R316
- **ASTM E2178 Air Barrier Material** - <0.04 L/(s\*m2) @ 75 Pa
- **Water Resistive Barrier** ICC-ES ESR-1375
- **ASHRAE 90.1 / ASHRAE 189.1 / IECC / IGCC** Continuous Insulation Standards
- **Class III Vapor Retarder** at 1 inch (> 1.0 perm)
- **Living Building Challenge Red List Free, with Declare label and Product Database Listing**



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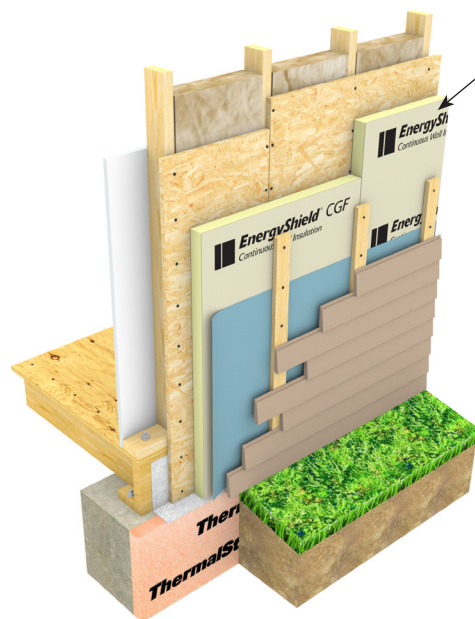
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**INSTALLATION:** EnergyShield® CGF NH may be installed on the exterior, interior, or within wall assemblies using fasteners, adhesives, or a combination of both. Check local building codes for thermal barrier requirements when using EnergyShield® CGF NH. Some of the common installations for EnergyShield® CGF NH include, but are not limited to, wood stud walls, masonry walls, concrete walls, over structural sheathing, steel stud walls, over exterior gypsum, over air and vapor barrier membranes. For specific installation instructions, contact Atlas.

### CONFIGURATION FOR WATER RESISTIVE BARRIER (WRB) AND AIR BARRIER:

EnergyShield® CGF NH can be used as part of a WRB and potentially part of an air barrier assembly. In these types of assemblies it is required that all joints, penetrations, and openings be taped or sealed by other means. Atlas recommends flashing EnergyShield® CGF NH into rough openings and other building transitions. The coated glass-mat facers are compatible with most flashing or sheathing tape, joint fillers, sealants, and adhesives. Consult the product manufacturer for specific compatibility.



EnergyShield® CGF NH combines high R-value, enhanced durability from two CGF coated glass-mat facers and water resistive attributes.

### PRECAUTIONS / LIMITATIONS:

- This product will burn and may contribute to flames and smoke spreading.
- When designing with or using this product, always follow local codes, especially with regards to WRB, Air Barrier and Vapor Retarder. Atlas highly recommends the use of a dew point calculation of the proposed wall assembly to determine the types and locations of weather resistive barriers as well as needed R-value to mitigate any condensation potential.
- EnergyShield® CGF NH is not a structural product, so local codes must be followed for required bracing of the frame wall.
- Storage: Prior to installation, EnergyShield® CGF NH should be stored indoors. If left outdoors for any length of time, it must be kept dry by covering completely with a waterproof tarpaulin. Store on flat pallets elevated at least 4 inches above the floor or ground and standing water.
- Follow the cladding manufacturer's recommendation for attachment of the cladding.
- Installed EnergyShield® CGF NH is not intended to be left exposed to the elements in excess of 60 days. Atlas recommends that all wall cladding material be installed within 60 days of installing the EnergyShield® CGF NH.

**WARRANTY:** A 15-year limited thermal warranty is available. Please see [wall.atlasrwi.com](http://wall.atlasrwi.com) or contact your Atlas representative. Atlas Roofing Corporation assumes no responsibility for building design or construction, which is solely the responsibility of the owner, architect, engineer or contractor.

Technical specifications are intended as general guidelines only, physical properties are representative based on testing, no warranties are given except for those specifically written by Atlas for its products.

**LOCAL Production and Support:** Atlas has the largest production footprint of any polyiso manufacturer for quick access to the products you need.

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Fax: (717) 975-6957	Fax: (936) 829-5363	Fax: (866) 740-6019	Fax: (706) 882-4047	Fax: (303) 252-4417	Fax: (602) 477-8897	Fax: (877) 909-4001	Fax: (604) 395-836

