QAI LABORATORIES
CERTIFICATION TESTING INSPECTION

VANCOUVER, BC: 877.461.8378 ph. | 604.527.8368 fx.
LOS ANGELES, CA: 909.483.0250 ph. | 909.483.0336 fx.
WASHINGTON, DC: 540.636.9445 ph. | 540.636.9414 fx.
TULSA, OK: 918.437.8333 ph. | 918.437.8487 fx.
TORONTO, ON 905.605.5444
WEBSITE: WWW.QAI.ORG

BUILDING PRODUCTS LISTING PROGRAM

Customer: Hercutech Incorporated
Class: Insulated Concrete Forms
Website: www.hercutech.com

Locations: Peorie, Arizona USA

Listing No. B1123-1
Project No. B1123-1 Edition 4

Effective Date: November 25, 2020
Last Revised Date: November 29, 2021
Expires: N/A

Standards:

ASTM C578	Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation.
UL 723	Standard for Test for Surface Burning Characteristics of Building Materials.
ASTM E119	Standard Test Methods for Fire Tests of Building Construction and Materials.
NFPA 285	Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Wall Assemblies Containing Combustible Components.

Product: HercuWall® Series 8 Panels and Accessories of the following types:

- Type S Panels
- Type SW Panels
- Type I Panels
- Type IW Panels
- Type A Panels
- HercuWall® Seaming Tape

HercuWall® Series 8 are available in an 8'' and 12'' concrete stud spacing, and Solid Shear wall option with solid concrete core (Type A panels are not available in Solid Shear wall options).

Additional accessories are available for use with HercuWall® Series 8 panels. Refer to QAI report CER_{US}-1003 for details.

Markings: Each panel is marked with a permanent label containing the following information:

a) Manufacturers name or recognized trademark
b) Product name
c) Traceability Code
d) Reference to QAI file B1123-1 and report CER_{US}-1003

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e) ASTM E84 Flame Spread Index and Smoke Developed Index (FSI ≤ 25 / SDI ≤ 450)
f) QAI logo shown here:

Models / Ratings: **The following outlines HercuWall® Series 8 Panels performance determined in accordance with the noted standards.**

HercuWall® Series 8 Panels thermal insulation specifications per ASTM C578:

PROPERTY	Expanded Polystyrene Insulation	
	TYPE II	TYPE IX
Compressive Strength Minimum @ 10% Deformation (psi)	15.0	25.0
Thermal Resistance Minimum @ 1 inch Thick ($F*ft^2*h/Btu$)	4.0	4.2
Flexural Strength Minimum (psi)	35.0	50.0
Water Vapor Permeance @ 1 inch Thickness Maximum (Perms)	3.5	2.5
Water Absorption By Volume Maximum (%)	3.0	2.0
Dimensional Stability Linear Change Maximum (%)	2.0	2.0
Oxygen Index Minimum (%)	24.0	24.0
Density Minimum (lbs/ft^3)	1.35	1.80

HercuWall® Series 8 Panels thermal insulation surface burning characteristics determined in accordance with UL 723:

EXPANDED POLYSTYRENE (EPS) INSULATION	DENSITY	MAXIMUM THICKNESS	FLAME SPREAD INDEX (FSI)	SMOKE DEVELOPED INDEX (SDI)
Type II - Type IX EPS	Maximum 2.65 lbs/ft^3	8.5 Inches Maximum	≤ 25	≤ 450

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HercuWall® Series 8 Panels fire-resistance ratings per ASTM E119 – Loadbearing† Walls and Partitions:

QAI Design #	Fire Resistance Rating	Sheathing
B1123-1a	**ASTM E119 – HercuWall® Series 8 Panels 1 Hour– Load Bearing[1] Fire Resistance-Rated Wall Assembly**	**1 Layer 5/8 (16 mm) Type X gypsum each face.**
B1123-1b	**ASTM E119 – HercuWall® Series 8 CFC Box Beam Panels 1 Hour– Load Bearing[1] Fire Resistance-Rated Wall Assembly**	**1 Layer 5/8 (16 mm) Type X gypsum each face.**
B1123-1c	**ASTM E119 – HercuWall® Series 8 Panels 2 Hour– Load Bearing[1] Fire Resistance-Rated Wall Assembly**	**2 Layers 5/8 (16 mm) Type X gypsum each face.**
B1123-1d	**ASTM E119 – HercuWall® Series 8 CFC Box Beam Panels 2 Hour– Load Bearing[1] Fire Resistance-Rated Wall Assembly**	**2 Layers 5/8 (16 mm) Type X gypsum each face.**

[1] Refer to report CER_{US}-1003 for allowable loading for HercuWall® Series 8 Panels used in Fire-Resistance Rated Assemblies

HercuWall® Series 8 Panels have been evaluated for potential to propagate fire per NFPA 285 and found compliant for the following exterior walls assemblies:

QAI Design #	Assembly	Results
B1123-1e	HercuWall® Type S, SW and A Panels, used in Exterior Walls Cladding per Design Listing B1123-1e	**Complies with NFPA 285 Requirements**

Notes:

Products must be installed with the manufacturer's published installation instructions and in accordance with the building codes recognized by the authority having jurisdiction.

Product is to be installed in accordance with the QAI Design Listing and manufacturer's published installation instructions by qualified installing personnel.

Final acceptance of the installed product is to be determined by the authority having jurisdiction.

Listed manufacturers are subject to on-going inspections by QAI to ensure that the products outlined above remains as it is listed.

The materials, products or systems listed herein have been qualified to bear the QAI Listing Mark under the conditions stated with each Listing. Only those products bearing the QAI Listing Mark are considered to be listed by QAI. No warranty is expressed or implied, and no guarantee is provided that any jurisdictional authority will accept the Listing found herein. The appropriate authorities should be contacted regarding the acceptability of any given

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