

# Cement-Board Stucco (CBS) 1000 CI

Highly impact water-drainage wall system incorporating PermaBASE CI<sup>™</sup> polyiso insulated cement board, reinforced base coat and 100% acrylic polymer exterior finish.

## **System Description**

Senergy CBS 1000 CI is a high-impact, water-drainage wall cladding system that incorporates a Senergy air/water-resisitive barrier, drainage mat and features PermaBASE CI<sup>™</sup> Insulated Cement Board by PermaBASE<sup>®</sup> Building Products, LLC installed with a polymer-modified base coat, fiberglass reinforcing mesh, and finishes. CBS 1000 CI system provides ease of design to ensure energy code compliance, high impact and increased dimensional stability without sacrificing design freedom.

#### **Design Considerations**

Maximum substrate design deflection is L/360. Substrate must be level within  $1\!\!\!/4"$  in 10' (6 mm in 3 m)

Locate control joints approximately every 600 ft<sup>2</sup> (56 m") of wall surface area with maximum uncontrolled length or width of 24 lin. ft. (7 m) and a maximum uncontrolled length-to-width ratio of 2 1/2:1

Expansion joints are required in the system where they exist in the substrate, where the system adjoins dissimilar construction, at changes in substrates, at floor lines in multilevel wood frame construction, and where movement is anticipated

## Uses

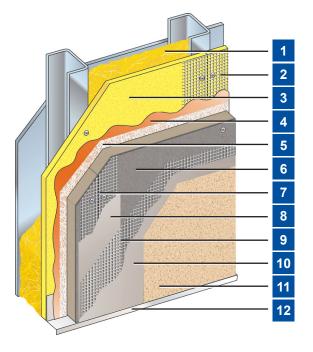
Exterior walls in new or retrofit commercial, institutional and residential construction such as hotels, hospitals, retail, schools, multi-family apartments and condominiums, and government facilities.

#### **Material Substitution**

Material substitution will adversely affect system performance and will void all warranty coverage unless approved in writing by Master Builders Solutions Wall Systems.

#### Warranty

Refer to the Senergy Warranty Schedule for specific information about this product/system.



- 1. Cavity Insulation\*
- 2. Approved Joint Reinforcement
- 3. Acceptable Sheathing\*
- 4. Senershield-R/-RS or-VB
- 5. Drainage Mat
- 6. PermaBASE CI™ Insulated Cement Board\*
- 7. Self Adhering Mesh Tape
- 8. Senergy Base Coat
- 9. Senergy Reinforcing Mesh
- **10.** Senergy Base Coat
- 11. Senergy Finish
- 12. Flashing or Starter Track\*
- (\*By Others)



Test Results:							
TEST	METHOD	CRITERIA	RESULTS				
Transverse Wind-load	ASTM E330	Steel stud framing (20 gauge, 3 5/8") @ 16"o.c.,	Maximum allowable transverse load: +/- 36 psf (+/- 1723 Pa)				
Transverse Wind-load	ASTM E330	Wood assembly (2" x 4") @ 16"o.c.	Maximum allowable transverse load: +/- 40.8 psf (+/- 1953 Pa)				
Radiant Heat Exposure	NFPA 268	No ignition at 20 minutes	Met test criteria.				
Intermediate Scale Multi- story Fire Test	NFPA 285 / UBC Standard 26-9	1. Resist flame propagation over the exterior surface	Met test criteria				
		2. Resist vertical spread of flame within combustible core/component of panel from one story to the next					
		3. Resist vertical spread of flame over the interior surface from one story to the next					
		4. Resist lateral spread of flame from the compartment of fire origin to adjacent spaces					
Surface Burning	ASTM E84 / UL 723	Flame spread < 25 Smoke developed < 450	All components of the system meet Class A performance (FS < 25; SD < 450)				
Abrasion Resistance	ASTM D968	No Cracking or loss of film integrity at 528 qt. (500L) of sand	Finish Coat not worn through after 686 liters of falling sand				
Accelerated Weathering	ASTM G 153 (formerly G23)	No deleterious effects after 2000 hours.	Pass				
Mildew Resistance	Mil Std 810B Method 508	No fungus growth after 28 days	Pass				
Salt Fog Resistance	ASTM B117	No deleterious effects after 300 hours	Pass				
Water Resistance	ASTM D 2247	No deleterious effects after 14 days exposure	Pass				

PermaBASE CI Physical Properties per National Gypsum:						
TEST	METHOD	1 INCH	2 INCH			
Dimensional Stability	ASTM D2126	<0.5%	<0.5%			
Water Absorption	ASTM D209	<5.0%	<5.0%			
Water Vapor Transmission	ASTM E96	<1.5 perms	<1.5 perms			
Flame Spread	ASTM E84	<25	<25			
Smoke Development	ASTM E84	<450	<450			

Water Vapor Transmission	ASTM E96	<1.5 perms	<1.5 perms	<1.5 perms
Flame Spread	ASTM E84	<25	<25	<25
Smoke Development	ASTM E84	<450	<450	<450
R-Value	ASTM C518	4	10	16
Dimensions	ASTM C473	1" x 4' x 8'	2" x 4' x 8'	3" x 4' x 8'
Weight		2.2 lbs. / sq. ft	2.4 lbs. / sq. ft	2.6 lbs. / sq. ft

**3 INCH** <0.5% <5.0%

#### Limitations

- For use on above grade vertical walls. System must terminate a minimum of 8-inches (200 mm) above grade.
- Additives are not permitted for any Master Builders Solutions product unless approved in writing by Master Builders Solutions Wall Systems.
- All products must be installed at minimum 40 °F (4 °C) ambient and substrate temperatures unless otherwise noted on specific Master Builders Solutions Product Bulletins.
- Protect all work from precipitation for at least 24-hours after application.
- All products must be stored in accordance with specific instructions on relevant Master Builders Solutions Product Bulletins.
- All substrates must be clean, dry and sound without planar irregularities greater than 1/4-inch per 10-feet (6 mm per 3 m).

# **Limited Warranty Notice**

Master Builders Solutions Construction Systems US, LLC ("Master Builders") warrants this product to be free from manufacturing defects and to meet the technical properties on the current Technical Data Guide, if used as directed within shelf life. Satisfactory results depend not only on quality products but also upon many factors beyond our control. Master Builders MAKES NO OTHER WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO ITS PRODUCTS. The sole and exclusive remedy of Purchaser for any claim concerning this product, including but not limited to, claims alleging breach of warranty, negligence, strict liability or otherwise, is shipment to purchaser of product equal to the amount of product that fails to meet this warranty or refund of the original purchase price of product that fails to meet this warranty, at the sole option of Master Builders. Any claims concerning this product must be received in writing within one (1) year from the date of shipment and any claims not presented within that period are waived by Purchaser. Master Builders WILL NOT BE RESPONSIBLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFITS) OR PUNITIVE DAMAGES OF ANY KIND.

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