This technical data sheet is based upon the CSC Manu-Data[®] format.

May 2021

1. Product Name

Enviroshingle Roofing

2. Manufacturer

Enviroshake 650 Riverview Drive Chatham, Ontario, N7M 0N2 Canada

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Enviroshingle Installation in Accora Village

3. Product Description

DESCRIPTION

Enviroshingle is a composite roof shingle that authentically emulates the look of a natural perfection cedar shingles that competes in the specialty and premium roof markets.

BASIC USE

Enviroshingle composite shingles are used for roofing and siding applications. Properly installed shingles provide long lasting weather protection and a rustic aesthetic look weatherproofing system.

BENEFITS

Enviroshingle gives the pleasing aesthetic of cedar shingles with lifetime performance and with minimal amount of maintenance.

The 2 profiles that the Enviroshingle comes in are made from the 3D images of real cedar shingles, to ensure the wood

grains, thickness, and sizes are all true to nature.

They come in three tones: Aged Cedar, Silvered Cedar, and Tropical Silver that weather with exposure to UV, and as with cedar, there will be variations in shading to provide a natural look on the roof.

No special tools are needed to install Enviroshingle composite shingle roofing.

Enviroshingle comes in Gold and Standard Level warranties with a lifetime warranty for residential applications and a 50-year warranty for commercial applications, 25-year warranty for Caribbean applications. See Warranty Document for more information.

LIMITATIONS

Enviroshingle should not be installed over existing asphalt shingles, or OSB or roof slopes less than 2:12.

TYPES AND SIZES

Enviroshingle comes in lengths of 20", each with a width of 12".

The SC shingles are bundled with white wrapping/strapping, and AC shingles are bundles with green wrapping and yellow strapping bearing the Enviroshingle script, labeled, and shrink-wrapped on skids (84 bundles per skid) for shipping. Each bundle contains 7 pieces of varied profiles. There are 20 bundles to a "Square" at a 5½" exposure. Ridge caps are 12"-wide one-piece shingles, custom formed to the specification of the roof slope and are packaged in bundles of 10 pieces using white strapping for SC and yellow strapping for AC bearing the Enviroshingle script.

COVERAGE

1 square covers 100 square feet when installed at a 51/4" exposure. The minimum slope is 2:12. There is no limit on the maximum slope.

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4. Technical Data

Copies of test procedures and results are available upon request.

Canadian Construction Materials Centre (CCMC) Technical Guide Master Format Re-evaluated October 2017		International Conference of Building Officials (ICC) Acceptance Criteria for Special Roofing Systems- Protocol AC07		Building Materials Evaluation Commission (BMEC) Dec. 1999	
	T	,			<u> </u>
Testing Procedure	Standard	Testing Procedure	Standard	Testing Procedure	Standard
A. Physical and Mechanical Properties		1. Weatherometer	ASTM G23 ASTM G26 ASTM D790		ASTM D2794
1. Density	ASTM D792	2. Roof classification		1. Impact Testing 2. Water Absorption	ASTM D570
-				•	
2. Impact Izod	ASTM D256 (Method A (1))	-fire retardant	UBC Standard 15-2 ICBO 4.9	3. Wind Resistance	ASTM D3161
3. Dimensional Stability	CGSB-37.58-M86	Accelerated weathering and ignition/burning rate tests	UBC Standard 26-6 UBC Standard 26-7 ICBO 4.9	4. Tear Strength/Nail Head Resistance	ASTM D1037
4. Water Absorption	CCMC 6.4.1	3. Wind Uplift	Any test (dynamic, static and structural calculations)	5. UV Exposure	ASTM G-53
5. Strain Energy	ASTM D5147, CCMC 64.3	4. Wind-Driven Rain	ICBO 4.3	6. Freeze Thaw	ASTM C666
6. Modulus of rupture (static bending)	ASTM D1037	5. Uplift-Bend	ICBO 4.4		
7. Ozone resistance	ASTM D1149	6. Penetration	ICBO 4.2		
B. Performance Roofing System		7. Temperature-cycling	ICBO 4.8		
1. Uplift bend	CCMC 64.4	8. Flexural strength	ICBO 3.5.2 UBC Standard 15-5	-	
2. Traffic load	ASTM E661, DADE PA 100-95			111111	
3. Wind uplift	DADE PA 100-95				
4. Dynamic pressure water infiltration	DADE PA 100-95				111
5. Nail pull-through	ASTM D1037			1111	
6. Accelerated weathering	ASTM G155, CCMC 6.4.7]			111
7. Heat ageing	CCMC 6.4.8			11//	111
8. Freeze thaw	CCMC 6.4.9	1		Enviroshing	le
9. Fire (Class C and Class A available)	ASTM E108				

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APPLICABLE STANDARDS

ASTM International

- ASTM D7349/D7349M, Standard Test Method for Determining the Capability of Roofing and Waterproofing Materials to Seal around Fasteners.
- ASTM E108, Standard Test Methods for Fire Tests of Roof Coverings.

Canadian General Standards Board (CGSB)

 CGSB-37.58-M86, Membrane, Elastomeric, Cold-Applied Liquid, for Non-Exposed Use in Roofing and Waterproofing.

Florida Building Code Testing Application Standard (TAS)

• TAS-125- Test for Uplift Resistance on Roof Assemblies

Miami-Dade Construction Standards (DADE)

DADE PA 100-[2000], Test
 Procedure for Wind and Wind Driven
 Rain Resistance of Discontinuous
 Roof Systems.

Underwriter's Laboratories

 UL 2218, Impact Resistance of Prepared Roof Covering Materials, Class 4.

US Green Building Council

• USGBC: LEED® NC Version 2.2.

APPROVALS

- American Society for Testing and Materials Limited.
- California Building Materials Listing No. 4175-2114:0100
- Florida Building Code FL#16037-R2
- Miami Dade County NOA No. 19-0807 04
- National Building Code of Canada.
- Canadian General Standards Board:
 Stability Testing Products are tested

- at temperature cycles ranging from 40°F (-40°C) to 160°F (71°C).
- National Building Code of Canada.
- Uniform Building Code: UV Testing -2000 hours of accelerated weathering tests are completed to ensure no evidence of change in physical properties

ENVIRONMENTAL CONSIDERATIONS

Enviroshingle composite roofing shingles are slippery when wet. Do not walk on Enviroshingle composite roofing shingles while they are rain, ice, frost or snow covered.

SUSTAINABILITY CONSIDERATIONS

For information on LEED Prerequisites and Credits associated with this product, refer to the "LEED Brochure on the Enviroshake® Inc. web site at http://www.enviroshake.com.

5. Installation

Enviroshingle should be installed as a new roofing system.

Install drip edge, valley and ridge flashings, eaves protection and synthetic underlayment before installing shingles (a 36" ice and water shield membrane is used on eaves, valleys, rakes, hips and ridges). Enviroshield synthetic underlayment is a requirement to achieve Gold Level Warranty.

Use double starter course at bottom edges, including vertical and high slope roof surfaces.

Fasten each shingle with four 1½" stainless steel nails minimum regardless of shingle

width. Although stainless steel nails are preferred hot-dipped galvanized nails are also acceptable.

Lay each consecutive row of shingles at 51/4" exposure, ensuring that there is no keyway on keyway, and that there is a 3/8" gap between every shingle (including the starter row).

Using a synthetic underlayment negates the need for interweaving.



Cut shingles to fit accurately around roof projections.

Use only uncut factory edges kept flush along rake and gable ends and where ends are exposed.

Install prefinished soffits and facia material where indicated.

Install roof ventilators and other roofing accessories where indicated.

When using a ridge venting system, drop the ridge cap slope by 1 size.

The minimum roof slope on which Enviroshingle is recommended is 2:12. For more detailed installation instructions refer to the Enviroshingle Installation Guide. This technical data sheet is based upon the CSC Manu-Data® format.

6. Availability and Costs

AVAILABILITY

Order composite roof shingles 2 – 4 weeks before required delivery dates.

COSTS

Contact Enviroshake for current product costs.

7. Warranty

Enviroshake comes in Gold and Standard Level warranties with a 50-year warranty for commercial installations and limited lifetime warranty for residential installations. (Caribbean applications have a 25-year warranty)

Warranty is dependent upon installation by a Factory Trained Enviroshake Installer. Please see Warranty Document for further details.

8. Maintenance

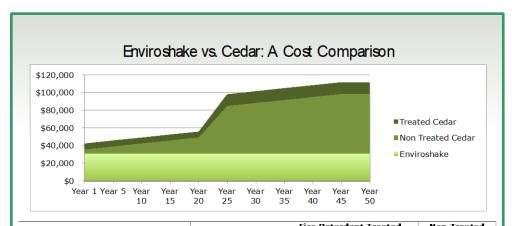
Composite shake roofing should be regularly inspected for organic built up and should be removed from the roof. No special tools are required for roof maintenance.

9. Technical Services

Technical representative will visit project site as required during construction.

10. Filing Systems

- MasterFormatTM 07 31 34.
- OmniClassTM
 Table 21 02 10 20 90.
 Table 22 07 31 34.
 Table 23 13 39 21.



	Enviroshake	Fire Retardant Treated Cedar	Non Treated Cedar
	LIIVIIOSIIAKC	Ceuai	#1 Blue Label
Products	Enviroshake	#1 Blue Label Cedar	Cedar
Size of Roof	Typical Roof	Typical Roof	Typical Roof
Material Cost (2012) / Sq Ft.*	\$5	\$4	\$3
Cedar Breather or Strapping / Sq Ft.*	NA	\$1	\$1
Interweaving / Sq Ft.	NA	\$1	\$1
Waste factor %	5%	15%	15%
Starter row %	5%	5%	5%
Comparable Material Costs / Sq Ft.	\$5.25	\$6.90	\$5.75
Comparable Installation Cost at			
Year 1	\$32,000	\$42,057	\$33,600
	No Roof	Maintenance \$3400	Maintenance
Year 5	Maintenance	Hameenance \$3400	\$3400
	No Roof	Maintenance \$3400	Maintenance
Year 10	Maintenance	*	\$3400
V 1F	No Roof	Maintenance \$3400	Maintenance
Year 15	Maintenance No Roof		\$3400 Maintenance
Year 20	Mo Rooi Maintenance	Maintenance \$3400	*3400
redi 20	No Roof		\$3400
Year 25	Maintenance	\$42,057	\$33,600
1041 25	No Roof		Maintenance
Year 30	Maintenance	Maintenance \$3400	\$3400
	No Roof	Maintenance \$3400	Maintenance
Year 35	Maintenance	mailitellance \$3400	\$3400
	No Roof	Maintenance \$3400	Maintenance
Year 40	Maintenance	Frantienance \$3400	\$3400
	No Roof	Maintenance \$3400	Maintenance
Year 45	Maintenance		\$3400
Total Spent after 50 years	\$32,000	\$111,314	\$94,400
NOTES:			

- * Taxes (PST & GST) have not been figured into costs as both are constants
- *** This represents an average roof of a 4/12 pitch, and does not include tear off of existing shakes or dump fees
- ****Above does not include additional materials required (underlay, drip edge, valleys, nails, vents, ridge caps, and flashing)
- *****Roofs with steeper pitch, gables, dormers etc. will have a higher installation cost that would be representative for both cedar and Enviroshake cost models

Enviroshake

www.enviroshake.com

1-866-423-3302