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**CCMC 13079-R**

**CCMC**

*EVALUATION  
REPORT*

DIVISION 02622

Issued 2002-07-30

Re-evaluation due 2005-07-30

## ***Wrap-N-Drain “X”***

Advanced Coatings,  
A Division of Atlas Block Co. Ltd.  
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Plant: Oldroyd Systemer AS  
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### ***1. Purpose of Evaluation***

The proponent sought confirmation from the Canadian Construction Materials Centre (CCMC) that “Wrap-N-Drain “X” can serve as a drainage material conforming to the intent of the Ontario Building Code (OBC).

### ***2. Opinion***

Subject to the limitations and conditions stated in this report, test results and assessments provided by the proponent show that “Wrap-N-Drain “X” complies with CCMC’s Technical Guide, “Foundation Drainage Systems”, Masterformat number 02622, dated 95-03-07, as a Class B, Type 2 drainage product, and provides a level of performance equivalent to that required in:

- Ontario Building Code, 1997, Clause 9.14.2.1.(2)(b), and Sentence 9.14.2.1.(3).

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Canada Mortgage and Housing Corporation permits the use of this product in construction financed or insured under the National Housing Act.

### 3. Description

“Wrap-N-Drain “X” is a black polypropylene sheet roll, with a dimpled surface on one side to provide an air gap between the concrete wall and the adjacent soil.

The “Wrap-N-Drain “X” sheet pattern features double cone dimples 6 mm high and about 25 mm on centre, joined by channels. The product is available in rolls that are 0.5 mm thick and 20 m in long, and up to 2.40 m wide.

The foundation wall installation is shown in Figure 1.

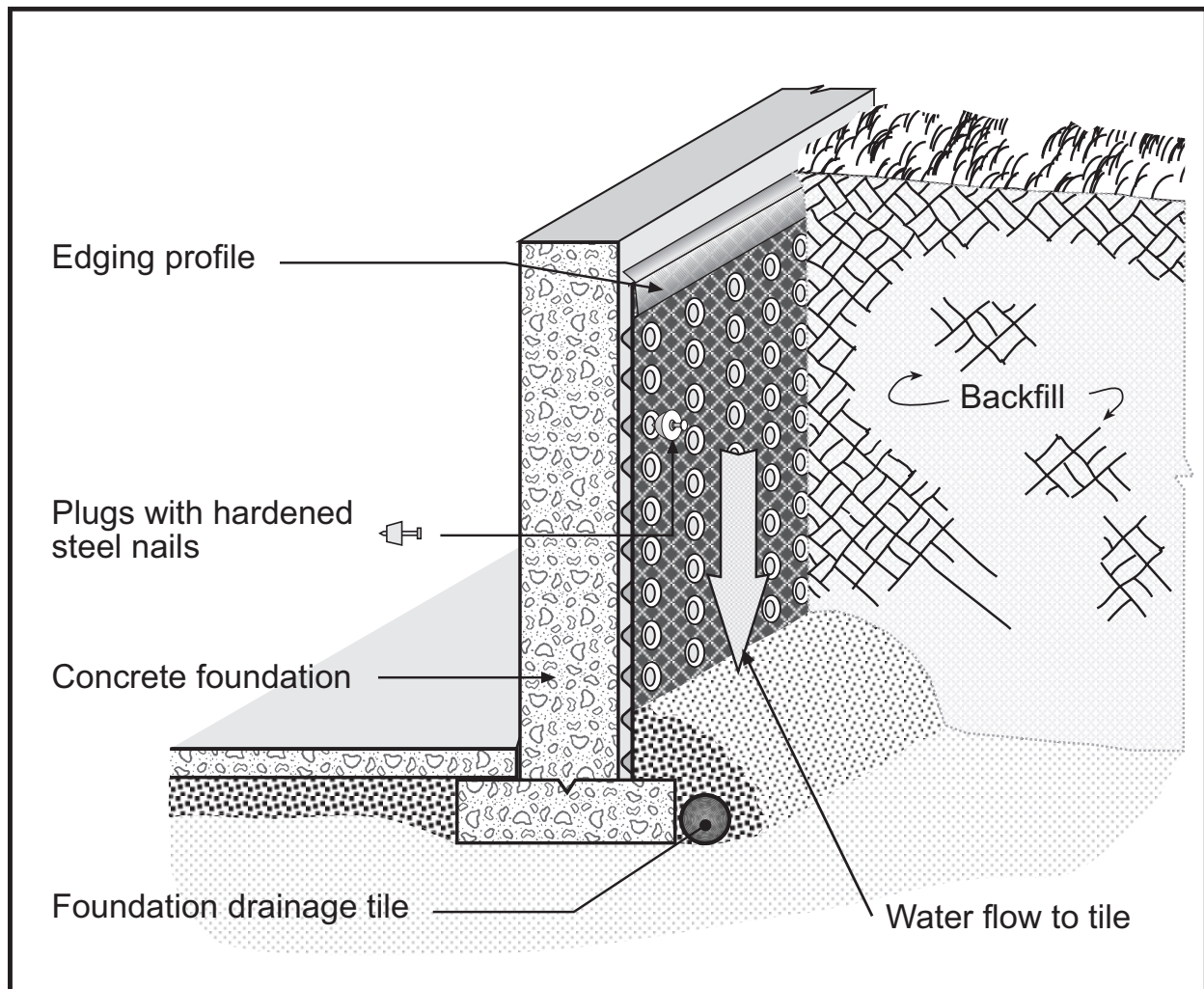


Figure 1. Installation of “Wrap-N-Drain “X”

### 4. Usage and Limitations

- “Wrap-N-Drain “X” is a Class B Type 2 drainage product designed as a protective layer or as a capillary breaking layer against the foundation wall to protect it against transient or intermittent water that may come in contact with the wall surface.
- As a Type 2 drainage product, “Wrap-N-Drain “X” has been evaluated for use in depths up to 3.7 m below grade.

- “Wrap-N-Drain “X” is suitable for use in pervious and semi-pervious soil conditions that allow for some drainage through the soil. These soils comprise very fine sand, organic and inorganic silts, mixtures of sand, silt and clay, glacial till, and stratified clay deposits, that have a soil grain size defined by  $D_{10} > 0.002$  mm, where  $D_{10}$  is the sieve size that permits 10% by weight of the soil to pass through it in a sieve analysis test.

“Wrap-n-Drain “X”“ is not to be used in practically impervious soil conditions where the soil grain size is  $D_{10} < 0.002$  mm.

- “Wrap-N-Drain “X” is only one portion of the total foundation drainage system which consists of a combination of design and construction processes that use different products. A well-functioning weeping tile or pipe system to directs water away from the foundation wall is required.

- The placement and grading of backfill shall conform to the requirements of Subsection 9.12.3. of the OBC. It is recommended that an impervious “topping off” layer of clay silt material be placed on top of the backfill with a positive slope leading surface water away from the building.
- “Wrap-N-Drain “X” must be installed in accordance with the manufacturer’s instructions. “Wrap-N-Drain “X” must be protected from exposure to ultra-violet radiation (sunlight) within 30 days of its installation.

This Evaluation Report is applicable only to products identified directly or on their packaging with the following: “CCMC 13079-R.”

### 5. Performance

Testing was conducted at an independent laboratory recognized by CCMC.

The results of testing “Wrap-N-Drain “X” are summarized in Table 1.

**Table 1. Performance Requirements Test for “Wrap-N-Drain “X”**

Property	Requirements	Results
Side Water Inflow Rate (mL/15 min)	500	Passed
Deformation under Compressive Load (mm)	< 3 @ 65 kPa	Passed
Deformability %		
-machine direction	≥ 15	43
-cross machine direction	≥ 10	42

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*Note: Readers are asked to refer to limitations imposed by NRC on the interpretation and use of this report. These limitations are included in the introduction to CCMC’s Registry of Product Evaluations, of which this report is part.*

*Readers are advised to confirm that this report has not been withdrawn or superseded by a later issue by referring to <http://irc.nrc.gc.ca/ccmc>, or contacting the Canadian Construction Materials Centre, Institute for Research in Construction, National Research Council of Canada, Montreal Road, Ottawa, K1A 0R6; Telephone (613) 993-6189, Fax (613) 952-0268.*