

SPECIFICATION DATA SHEET

ADVANCED

COATINGS INC.

GEO-WRAP DRAINAGE COMPOSITE

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Foundation Drainage Systems
ADVANCED COATINGS INC.

1. PRODUCT NAME

Geo-Wrap Drainage Composite

2. MANUFACTURER

Advanced Coatings Inc.

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3. PRODUCT DESCRIPTION

Basic Use: Geo-Wrap performs a multi-faceted role by providing protection for waterproofing systems and managing sub-surface water around building foundations. Geo-Wrap provides effective protection for foundations of all kinds, in applications ranging from major civil and commercial projects to residential basements. Soil backfill is retained by a filter fabric while allowing water to pass into the drainage core providing hydrostatic relief. Collected water is then conveyed to a proper collection system.

Example uses include:

- Foundation walls (both waterproofed and non-waterproofed)
- Retaining walls
- Planters
- Lagging systems
- Bridge abutments

Composition and Materials: Geo-Wrap is a high-performance, high strength drainage composite consisting of a three dimensional, high impact polypropylene core and a non-woven filter fabric.

Geo-Wrap's geo-textile and polypropylene are welded together in a special thermal process to form a permanent bond. Unlike conventional geo-textile membranes which are

glued, Geo-Wrap's filter fabric will not easily separate and isn't subject to slipping over time. Fully bonding the geo-textile to the core's dimples prevents the geo-textile from being pushed into the flow channels by backfill. Water can pass freely and easily through the geo-textile and into the drain core where gravity feeds it into the drainage systems and pipes.

Geo-Wrap's polypropylene core ensures a highly flexible product well-suited to dealing with complicated construction details providing a high compressive strength system withstanding installation and in-situ earth stresses.

Limitations: In all cases Geo-Wrap must be protected from ultraviolet rays and mechanical damage and should not be left permanently exposed. Geo-Wrap is resistant to chemicals in normal soil conditions. However some reagents may affect its performance.

Thickness: Core thickness 0.6mm (24 mil), Stud height 5.0mm

Packaging: 2m x 15m (6.6' x 49') rolls (12 rolls/skid).

4. TECHNICAL DATA

Applicable Standards: Refer to Physical Properties chart for complete list of standards governing Geo-Wrap properties.

Environmental: Geo-Wrap is non-toxic, non-carcinogenic and is unaffected by freeze-thaw cycles

5. INSTALLATION

Preparatory Work: Concrete surfaces must be prepared to receive drainage composite. Surfaces should be smooth, free of depressions, voids, protrusions, clean and free of other surface contaminants that may impair the performance of drainage.

Methods: Geo-Wrap can be installed in rows or columns with the fabric side toward the soil. Each method has its advantages depending on the criteria of the project as to which method is best.

When installing the Geo-Wrap in rows:

- Ensure flat tab of the roll is at the top of the roll and rest the bottom part of the roll flush with the footing. Unroll horizontally moving from right to left (counter clockwise).
- Attach subsequent rolls in shingle fashion. It is acceptable to: (1) Overlap the upper roll dimples onto the dimples of the lower roll by 100 mm (4").



Physical Properties Chart

GEO-WRAP DRAINAGE COMPOSITE

Core:	
Material	Polypropylene
Colour	Black
Dimple height	5 mm
Membrane thickness (ASTM D638)	0.6 mm (24 mil)
Compressive strength (SPF VN2200)	400 kN/m ² (8350 psf)
Service temperature	-40°C to + 80°C (-40°F to 176°F)
Tensile strength **(ISO 527 MD*)	44 Mpa
Elongation at break **(ISO 527 MD*)	820%
Vapour permeability resistance (ASTM E96)	5 ng/Pa·s·m ²
Vicat softening point	148°C
Weight	523 g/m ²
Geotextile: Typar D110	
Tensile strength (EN ISO 10319)	7.5 kN/m
Grab Tensile strength (ASTM D 4633)	475 N
Elongation at max. load (EN ISO 19319)	75%
Puncture resistance (EN ISO 12236)	1000 N (225 lbs)
Water permeability (EN ISO 11058)	70·10 ⁻³ m/s
Opening size (EN ISO 12956)	140 µm
Weight	110 g/m ²
Composite System:	
Water flow capacity (ASTM D4716) (Stress q=200 kPa, GR=1)	45 L/min·m
Roll sizes (height x length)	2.00 m (6.6') x 15 m (49')
Roll weight	19 kg (42 lbs)
Packing units 12 rolls/pallet	360m ² /pallet (3880 sq.ft)

*MD = machine direction

** Without Geotextile

5. INSTALLATION CONTINUED

When installing Geo-Wrap in columns:

- Start at the low point of the wall and attach the roll to the wall moving upwards vertically.
- Adjacent rolls may be:
 - (1) joined together with the dimpled edge of the roll placed over the flat tab edge of the previous roll;
 - (2) overlap the dimples of the preceding roll onto the dimples of the previous panel by 100mm (4").

The fabric from the adjacent panels should overlap the preceding roll. Rolls are fastened to the wall with the use of a washer and 1 1/4" concrete nail.

Note: These guidelines serve as a basis for installation. Detailed instructions are included in the product packaging.

6. AVAILABILITY AND COST

Availability: Geo-Wrap is available across Canada and throughout the

U.S., usually shipped from stock. Contact Advanced Coatings Inc. for list of Dealers/Applicators.

Cost: Current price list available from Dealers/Applicators along with standard conditions of sale.

7. WARRANTY

The information herein is the best available relating to Geo-Wrap, and the recommendations contained herein are based on tests believed to be reliable. We warrant our products to be of merchantable quality and suitable for the purpose for which it is intended. We do not make any other warranty, express or implied, statutory or otherwise.

8. MAINTENANCE

Geo-Wrap drainage composite does not require any maintenance if installed in accordance with the manufacturer's instructions.

9. TECHNICAL SERVICES

Technical Support is available from Advanced Coatings Inc. Call Toll-Free Head Office: 1-800-787-8059 or Toll-Free Branch Office: 1-800-730-0814

Specification Assistance.

Site advice and recommendations.

10. RELATED REFERENCES

Master Specification (Microsoft Word) suitable for use by specifying authorities.

Advanced Coatings Inc. Rub-R-Wall Manu-Data Literature.

Canadian Construction Materials Centre Approved CCMC#13579-R

