

SECTION 07130

SHEET WATERPROOFING

PART 1 DESIGN DIRECTIVES

1.1 DESIGN CRITERIA

- A. All elevated floor locations that include a floor drain must be reviewed with the college regarding the need for including sheet membrane waterproofing.
- B. The water-proofing detail used by Dartmouth College must be reviewed with the design team at the earliest convenience prior to beginning Schematic Design documents. The College has developed very specific requirements for this work.
- C. Below Grade Vertical Building Waterproofing shall be used over smooth foundation walls, half pipe tunnels, and concrete manholes.
- D. Above Grade Exterior Horizontal Waterproofing shall be used where surfaces are exposed to the weather and are above occupied areas.
- E. Sheet waterproofing shall not be used in shower areas or under interior floors.

PART 2 PRODUCTS

2.1 BELOW GRADE VERTICAL BUILDING WATERPROOFING

- A. Sheet membrane waterproofing shall be a self-adhesive, cold-applied composite sheet consisting rubberized asphalt (± 1.4 mm thick) and cross-laminated, high density polyethylene film (± 0.1 mm). The rubberized asphalt membrane shall be covered with a release sheet that is removed during installation. No special adhesive or heat shall be required to form laps.
 - 1. Bituthene 3000 – W. R. Grace & Co.
- B. Geocomposite factory fabricated drainage sheet system shall of a hollow inert core covered on one side with a filter fabric to prevent clogging of cores.
 - 1. Hydroduct 220 – W. R. Grace & Co.

2.2 ABOVE GRADE INTERIOR HORIZONTAL WATERPROOFING

- A. Sheet membrane waterproofing shall be a self-adhesive, cold-applied HDPE composite sheet consisting rubberized asphalt (± 1.4 mm thick) and cross-laminated, high density polyethylene film (± 0.1 mm). The rubberized asphalt membrane shall be covered with a release sheet that is removed during installation. No special adhesive or heat shall be required to form laps. Prepare the surface with an appropriate treatment compatible with the sheet membrane.
 - 1. Bituthene 4000 membrane, System 4000 surface conditioner - W. R. Grace & Co.

2.3 ABOVE GRADE EXTERIOR HORIZONTAL WATERPROOFING

A. Sheet membrane waterproofing shall be PVC (polyvinyl chloride) sheets with plasticizers reinforced with non-woven fiberglass. Provide all components from the manufacturer or approved for use by the manufacturer required for a complete installation including but not limited to flashings and adhesives.

1. Sarnafil #G476-20

PART 3 EXECUTION

- 3.1 The work area shall be thoroughly prepared as described in the manufacturer's written installation instructions. Particular attention shall be paid to the weather conditions expected during the application and the curing process.
- 3.2 Drainage sheets shall be used in all foundation waterproofing applications.
- 3.3 Prime substrate as directed by the manufacturer prior to installing sheet membrane systems.

END OF SECTION 7130