

1.04 SYSTEM DESCRIPTION



- A. Performance requirements:
 - 1. Geotextile:
 - a. UV resistance: 70% or more when tested in accord with ASTM D4355-84.
 - b. Permittivity: 150 gal/min/ft² (6105 l/min/m²) when tested in accord with ASTM D4491-85.
 - 2. Core material, compressive strength: Specified in PART 2 - PRODUCTS Article below for selected materials.
 - 3. Transmissivity or Flow Q with hydraulic gradient of 1 with confining stress indicated in MANUFACTURED UNITS Article in accord with ASTM D4716-95.

1.05 SUBMITTALS

- A. Product data: Manufacturer's product data; indicate products supplied. Provide complete installation instructions proposed for use.
- B. Samples:
 - 1. Subdrainage system material: 4" by 4".
 - **2. Modular drainage system material: 6" length

1.06 QUALITY ASSURANCE

- A. Pre-installation conferences: Coordinate with conference scheduled for waterproofing materials. Follow requirements indicated in waterproofing materials section.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Packing and shipping: Provide materials in original unopened containers with manufacturer's labels intact and legible.
- B. Acceptance at site:
 - 1. Unload materials: check for damage.
 - 2. Damaged materials determined by visual inspection will not be accepted.
 - 3. Remove rejected materials from site immediately.
- C. Storage and protection:
 - 1. Store materials in dry area in manufacturer's protective packaging in original containers with labels and installation instructions intact.
 - 2. Store materials under cover, off ground; protect from sunlight.

1.08 SEQUENCING AND SCHEDULING

- A. Schedule installation after waterproofing installation and curing ** and protection board placement ** just prior to backfilling operations.

PART 2 - PRODUCTS

2.01 MANUFACTURED UNITS

A. Acceptable manufacturers:

1. Products specified as standard of quality are manufactured by JDR Enterprises, Inc., 292 South Main Street Suite 200, Alpharetta, Georgia 30004. Telephone: 770.442.1461 or 800.843.7569. Fax: 770.664.7951.
2. Products of other manufacturers similar in type and quality are acceptable, subject to compliance with specified **

** requirements.

** requirements and submission of required data indicated in Product Substitution Procedures Section.

PRODUCT SELECTION GUIDE			
Application	Selection	Application	Selection
Foundation walls >12 ft.	300, 400, or 420*	Foundation walls <12 ft.	200 or 220*
Retaining walls >12 ft.	300 or 400	Retaining walls < 12 ft.	200
Retaining/Foundation walls	Modular Drainage System		
Underslab (On grade)	400	Under slab (ongrade)	302 (Heavy Duty)
Plaza decks (Regular)	400, 420*, 700, or 720*	Plaza decks (Vehicular)	300 or 1000*
Crib walls	302 or 400	Crib walls <12 ft.	200
Roof membrane assembly	400 or 420*	Roof gardens & planters	400, 420*, or 700, 720*
Split slab (Regular)	400, 420*, 700, or 720*	Split slab (H.D. vehicular)	1000*
Edge drains	SWD-6 or SWD-12	Trench drains	SWD-12, SWD-18, 302
Lagging walls	400 or 302		

(*). Compatible with waterproofing membranes WITHOUT protection layer - Visit web site at <http://www.i->

B. Geonet drainage system material, characteristics:

1. Type: JDR Enterprises, Inc.; **
 - ** J-DRain7; 300; Heavy duty core, single sided fabric.
 - ** J-DRain7; 302; Heavy duty core, double sided fabric.
 - ** J-DRain7; 1000; Heavy duty core, single sided fabric/protective sheet on back.
2. Core:
 - a. Material: Extruded HDPE; High Density Polyethylene Polymer, 0.945 density.
 - b. Thickness: **
 - ** 0.22" (0.56 cm), nominal, heavy duty.
 - ** 0.25" (0.632 cm), nominal, heavy duty.
 - c. Compressive strength: 30,000 PSF (1438 kN/m²), minimum.
3. Geotextile:
 - a. Material: Non-woven needle punched polypropylene.
 - b. Weight: 4.0 oz. per square yard (94.8 g/m²), minimum.
 - c. Treat fabric for UV stability to meet requirements in SYSTEM DESCRIPTION Article above.
 - d. Permittivity: Meet requirements in SYSTEM DESCRIPTION Article above.



4. Bonding core material to geotextile: Manufacturer's standard heat lancing.



5. Transmissivity or Flow Q of composite construction, geotextile bonded to core when tested in accord with ASTM D4716-95 with hydraulic gradient of 1 with confining stress of 3600 PSF: **
 - 300:** ** 7.0 gallons/min/ft. (86.93 lpm/m) width in accord with ASTM D4716-95.
 - 302:** ** 5.5 gallons/min/ft. (68.30 lpm/m) width in accord with ASTM D4716-95.
 - 1000:** ** 7.0 gallons/min/ft. (86.93 lpm/m) width in accord with ASTM D4716-95.

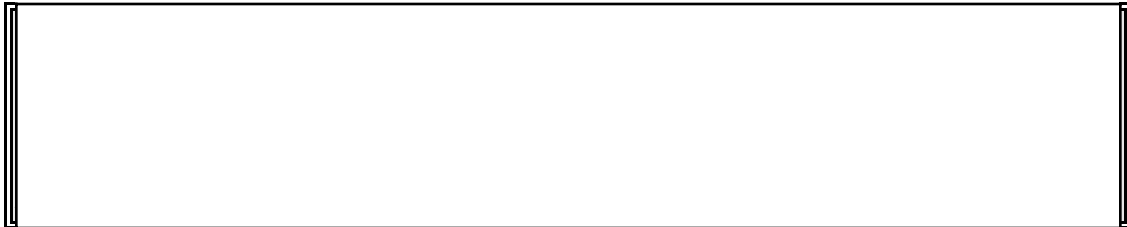


C. Dimple core drainage system material, characteristics:

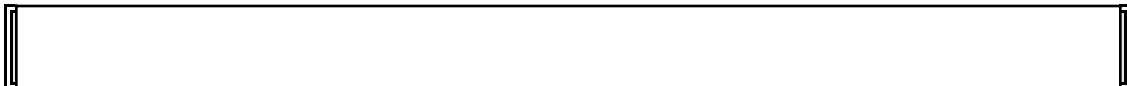
1. Type: JDR Enterprises, Inc.; **
 - ** J-DRain7; 200; light duty core, single sided fabric.
 - ** J-DRain7; 220; light duty core, single sided fabric with protective sheet on dimpled core.
 - ** J-DRain7; 400; normal duty core, single sided fabric.
 - ** J-DRain7; 420; normal duty core, single sided fabric with protective sheet on dimpled core.
 - ** J-DRain7; 700; heavy duty core, single sided fabric.
 - ** J-DRain7; 720; heavy duty core, single sided fabric with protective sheet on dimpled core.
2. Core:
 - a. Material: High Impact Polystyrene.
 - b. Type: Formed dimpled core.
 - c. Compressive strength: **
 - 200 Series:** ** 11,000 PSF (528 kN/m²).
 - 400 Series:** ** 15,000 PSF (719 kN/m²).
 - 700 Series:** ** 18,000 PSF (862 kN/m²).
3. Geotextile:
 - a. Material: Non-woven needle punched polypropylene.
 - b. Weight: 4.0 oz. per square yard (94.8 g/m²), minimum.
 - c. Treat fabric for UV stability to meet requirements in SYSTEM DESCRIPTION Article above.
 - d. Permittivity: Meet requirements in SYSTEM DESCRIPTION Article above.
4. Bonding core material to geotextile: Pressure sensitive applied to core, manufacturer's standard.



5. Transmissivity or Flow Q of composite construction, geotextile bonded to core when tested in accord with ASTM D4716-95 with hydraulic gradient of 1 with confining stress of 3600 PSF: **
200 Series: ** 7.0 gallons/min/ft. (112 lpm/m) width in accord with ASTM D4716-95.
400 Series: ** 15.0 gallons/min/ft. (188 lpm/m) width in accord with ASTM D4716-95.
700 Series: ** 18.0 gallons/min/ft. (226 lpm/m) width in accord with ASTM D4716-95.



- D. Modular drainage system material, characteristics:
1. Types:
 - a. JDR Enterprises, Inc.; J-DRain7; SWD-6 Modular Drainage System.
 - b. JDR Enterprises, Inc.; J-DRain7; SWD-12 Collection System.
 2. Sizes:
 - a. 6" high by 1" thickness by 150' rolls.
 - b. 12" high by 1" thickness by 150' rolls.
 3. Core:
 - a. Material: High Density Polyethylene.
 - b. Type: Formed dimpled core.
 - c. Compressive strength: 7,500 PSF (366 kN/m²).
 4. Geotextile:
 - a. Material: Non-woven needle punched polypropylene.
 - b. Weight: 4.0 oz. per square yard (94.8 g/m²), minimum.
 - c. Treat fabric for UV stability to meet requirements in SYSTEM DESCRIPTION Article above.
 - d. Permittivity: Meet requirements in SYSTEM DESCRIPTION Article above.
 5. Adhesive bonding core material to geotextile: Pressure sensitive applied to core, manufacturer's standard.
 6. Transmissivity or Flow Q of composite construction, geotextile bonded to core when tested in accord with ASTM D4716-95 with hydraulic gradient of 1 with confining stress of 3600 PSF: 170.0 gallons/min/ft. (2100 lpm/m)
 7. Furnish system manufacturer's standard polyethylene 6X6 corner fittings and 6X4 end-out, 6X4 side-out, and 6X4 corner-out fittings with 4" dia. female connector for connection to 4" dia corrugated plastic piping system specified elsewhere.



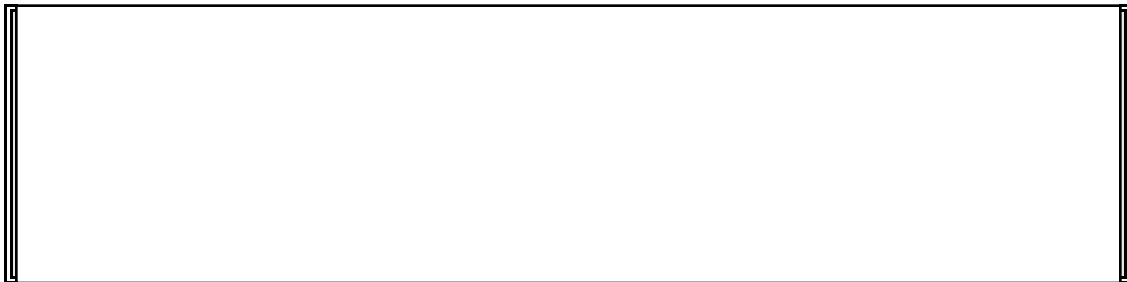
**E. Furring strips: Pressure treated lumber specified in Rough Carpentry Section.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verification of conditions:
 - **1. Verify waterproofing protection board is in place, if specified in respective waterproofing section.
 - 2. Examine conditions and substrates where products specified in this section are installed; submit written notification of unacceptable conditions or substrates.
 - 3. Submit copy of installer's report to Architect within 72 hours of report receipt.
 - 4. Proceeding with construction activities of this section:
 - a. Indicates acceptance of conditions or substrates.
 - b. Additional work in this section due to pre-existing conditions not noted will not be paid as extra.

3.02 INSTALLATION



- A. Foundation wall installation, general:
 - 1. Install subdrainage system material ** either ** vertically ** or ** horizontally ** in accord with manufacturer's reviewed installation instructions with core material facing protection board.
 - 2. Lap geotextile fabric joints in accord with manufacturer's installation instructions.
 - 3. Install subdrainage material at foundation drainage pipe material in accord with subdrainage system manufacturer's reviewed details for positive drainage directly to foundation drainage pipe.
 - **4. Horizontal application: Verify backfill lifts are installed and compacted prior to installation of next subdrainage system material course.
 - 5. Secure subdrainage system material to wall at grade in accord with manufacturer's indicated and reviewed installation instructions.
- B. Lagging installation, general:
 - 1. Install subdrainage system material vertically in accord with manufacturer's reviewed installation instructions.
 - 2. Lap geotextile fabric joints in accord with manufacturer's installation instructions.
 - 3. Install subdrainage material at foundation drainage pipe material in accord with subdrainage system manufacturer's reviewed details for positive drainage directly to foundation drainage pipe.
 - 4. Secure subdrainage system material to wall at grade in accord with manufacturer's indicated and reviewed Method 2, wood strip.
- C. Modular drainage system installation, general:
 - 1. Unroll material along foundation base; adhere to partially cured waterproofing

- material; use adhesive acceptable to waterproofing material manufacturer for cured waterproofing or other sheet waterproofing not requiring curing.
2. Install preformed corner fittings at foundation interior and exterior corners.
 3. Install outlet fittings where indicated; connect to corrugated drainage pipe if present at time of modular system installation; leave ready for connection to corrugated drainage pipe if not present.

END OF SECTION 02621

Specifications prepared for:
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