

SECTION 07 17 00 {07170}

BENTONITE WATERPROOFING

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This section includes a waterproofing system of bentonite clay contained within a cardboard panel, with subsequent protective cover, intended for below grade vertical and horizontal surfaces. Bentonite clay reacts with subsurface moisture to form a gel expanding 10 to 15 times its dry volume, and form watertight seal.

Special preparations of bentonite clay mixed with dry cement or asphalt binder; in liquid gel, trowel grade, or spray polymer applications are not specifically included in this section but can be edited in as required.

A layered sheet membrane comprised of high density polyethylene (HDPE) bonded with granular bentonite is described in Section 07 13 00 {07130}.

Manufacturers listed in this section were identified as representative and not as an endorsement for meeting this specification. For additional product information, visit 4Specs at www.4specs.com, ARCAT at www.arcata.com, First Source at www.reedfirstsource.com, SpecSource at www.specsource.com, and Sweets Network at products.construction.com.

This section includes performance, proprietary, and descriptive type specifications. Edit to avoid conflicting requirements.

Contact the CSRF Support Center at supportcenter@csrf.org to submit comments or suggestions for improvements to this specification. Visit the SPECTEXT web site at www.spectext.com for current product announcements.

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes bentonite clay waterproofing in panel form; [drainage panels] [and] [protective cover].
- B. Related Sections:
 - 1. Section 07 21 13 - Board Insulation: Rigid insulation protective cover.
 - 2. Section 07 95 00 - Expansion Control.
 - 3. Section 31 23 23 - Fill.
 - 4. Section 33 46 00 - Subdrainage.
- C. Related Sections:
 - 1. Section 02320 - Backfill.
 - 2. Section 02620 - Subdrainage.
 - 3. Section 05810 - Expansion Joint Cover Assemblies.
 - 4. Section 07212 - Board Insulation: Rigid insulation protective cover.

1.2 REFERENCES

List reference standards included within text of this section. Edit the following for Project conditions.

- A. National Roofing Contractors Association:
 - 1. NRCA - The NRCA Waterproofing and Dampproofing Manual.

1.3 PERFORMANCE REQUIREMENTS

Use this article carefully; restrict statements to identify system performance requirements or function criteria only.

Refer to subsurface investigation report for expected water head and water table depth. Refer to NRCA manual for assistance in selecting applications.

Certain soils containing acid, alkali, brine, or ground water contamination should have soil samples submitted to bentonite clay waterproofing panel manufacturer for analysis and recommendations for suitability of bentonite clay waterproofing capability.

- A. Waterproofing System: Capable of resisting water head of [_____] feet ([_____] mm) and preventing moisture migration to interior.

1.4 SUBMITTALS

Only request submittals needed to verify compliance with Project requirements.

- A. Section 01 33 00 - Submittal Procedures {01330 - Submittal Procedures}: Submittal procedures.
- B. Shop Drawings: Indicate required flashings, [control] [and] [expansion] joints, sealing at [openings,] [projections,] [penetrations,] [reglets,] [sealants,] [and] waterproofing of [holes,] [slots,] [sleeves,] [and] [_____].
- C. Product Data: Submit product criteria, characteristics, accessories, jointing and seaming methods, and termination conditions.
- D. Manufacturer's Installation Instructions: Submit special preparation of substrate, panel attachment methods, and perimeter conditions requiring special attention.
- E. Manufacturer's Certificate: Certify [products] [_____] meet or exceed [specified requirements.] [_____].
- F. Warranty: Submit manufacturer warranty and ensure forms have been completed in Owner's name and registered with manufacturer.