

SUGGESTED MASTER SPECIFICATION

SECTION 03 15 13 STRIP APPLIED WATERSTOPS (BENTOTAK DS)

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Provision of strip applied swelling waterstop, embedded in concrete and spanning contraction (control) joints and/or limited movement construction joints, to create a continuous diaphragm for prevention of fluid migration.

1.02 REFERENCES

- A. American Society for Testing and Materials (ASTM)

1.03 DELIVERY, STORAGE, AND HANDLING

- A. Protect waterstops from exposure to moisture that may cause premature waterstop expansion.
- B. Store waterstops under cover to protect from moisture, oil, dirt, and sunlight.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Provide strip applied, self-adhesive, expanding waterstop comprised of bentonite clay, polymer-modified bitumen, and mineral oil. Product shall be BENTOTAK DS, as supplied by Kingfield Construction Products located at 530 North 3rd Street, Suite #230, Minneapolis, Minnesota 55401. Phone: 612-225-5167. Email: info@kingfieldcp.com

- B. Performance Requirements:

Property	Test Method	Typical Values
Color	ASTM D1729	Grey-Black Paste
Odor		Mineral Oil
Application Temperature		32°F to 175°F
Service Temperature		-40°F to 215°F
Cone Penetration, 300g	ASTM D217	84-99 dmm
Specific Gravity	ASTM D71	1.403 ± 0.05 g/cm ³
Flash Point	ASTM D92	482°F

2.02 ACCESSORIES

- A. Provide BUCKET OF CLEAN WATER to activate water-based self-adhesive outer casing and continuously secure BENTOTAK DS to concrete.
- B. Provide concrete nails as required to secure BENTOTAK DS in vertical or overhead applications.

PART 3 EXECUTION
3.01 INSTALLATION

- A. Prepare cold joint and remove dust and debris from concrete.
 - a. BENTOTAK DS does NOT require a smooth concrete surface and will contour to the cold joint surface (concrete, aluminum, copper, iron, steel, aluminum, pvc, hdpe plastics, etc.)
- B. Adhere BENTOTAK DS to cold joint by dipping waterstop in water for 1-5 seconds and placing onto cold joint with a minimum of 1.2 inches concrete cover.
- C. Press BENTOTAK DS into cold joint into a triangular pattern along the entire joint.
- D. BENTOTAK DS shall be butt-spliced by molding the ends together ensuring no separation or air pockets
- E. Vertical Installation:
 - a. Judge by the bonding strength if nailing the waterstop to concrete is required. The product should not slump and when it dries, it will integrally adhere to cold joint. Use a nail with a large clout (head) if necessary, 3 nails per meter.
- F. IF THE PRODUCT IS SUBJECTED TO CONTINUOUS WET WEATHER, THE CONCRETE SHOULD BE POURED WITHIN 5 DAYS OF CONTINUOUS WATER CONTACT.
- G. Protect BENTOTAK DS from excess moisture, dirt, oil, and sunlight during the progress of the work
- H. Inspect BENTOTAK DS for premature swelling, discontinuity, and debris contamination prior to concrete pour. Replace unacceptable product.
- I. Place and thoroughly vibrate concrete, taking care not to disturb or displace BENTOTAK DS. Do not allow vibrator to contact BENTOTAK DS.

3.02 PRECAUTIONS

- A. Concrete should be poured within 10 days of BENTOTAK DS application.
- B. If BENTOTAK DS is subjected to continuous wet weather, concrete should be poured within 5 days of continuous water contact.
- C. If BENTOTAK DS has been subjected to continuous wet weather or ponding water, waterstop should be checked for functional integrity.
 - a. BENTOTAK DS will expand and appear cloudy
 - b. Spot cut 1-2 inch sections of BENTOTAK DS to check if there is any unswollen material left in core.
 - c. If there is a minimum of 1cm x 1cm of unswollen material, the concrete pour can continue.
 - d. If there is less than 1cm x 1cm of unswollen material, expanded BENTOTAK DS should be removed and new material applied.

END OF SECTION

For More Information Contact
Kingfield Construction Products
530 North 3rd Street, Suite #230
Minneapolis, MN 55441
United States
www.kingfieldcp.com
Phone: 1-612-225-5167
email: info@kingfieldcp.com