



Application Specification

AMMUNITION MAGNESITE

Purpose and Scope

Instructions for the surface preparation and application of Dex-O-Tex Ammunition Magnesite system conforming to Military Specification MIL-D-18873B as a non-sparking, fire retardant, smooth surface product for use between dunnage system of steel deck channels in cargo weapon stowage spaces or other ammunitions storage spaces.

ThicknessNominal 3/8” (9.5mm)
to 2” (50.8mm)

Required Equipment

- Several empty open-head 55-gallon steel drums
- Wheelbarrow, shovels, and mixing hoe
- Straight edge screeds
- Thickness gauge screed
- Knee boards on pegs and clamp on pegged soles
- Full set of trowels and floats, including finishing trowels and pointing tools
- Mechanical mixing equipment for the size of job

Surface Preparation

Prepare metal surfaces to SSPC-SP 11 Profile and protect from corrosion prior to the application of Marine Grade 150 primer. Bare metal surfaces must be dry and cleaned of all paint, grease, rust and scale by chipping, power-brushing or sandblasting. The use of metal clips is not required for application of Dex-O-Tex Ammunition Magnesite.

STEP ONE – Application of Approved Marine Grade 150 Primer

- A. Use an approved Marine Grade 150 type primer:

Premix and apply the Marine Grade 150 type primer per the manufacturer’s application instructions onto the prepared metal surface. Allow the primer to thoroughly dry per manufacturer’s instructions. Primer must comply with MIL-DTL-24441 specification. Leave no bare spots.

STEP TWO – Application of Magnabond 3

- A. Mix together the following materials:

Magnabond 3 Paste 1 gal
Magnabond 3 Powder 1 bag (40 lbs)

Blend the materials together thoroughly by drill mixing. The above material will cover approximately 100 sq. ft. at a 60 mil thickness. Workability time is about one (1) hour. Apply the Magnabond 3 mix onto the deck in a trowel application approximately 40 mils thick.

- B. Allow Magnabond 3 to dry overnight, or to a point it is sufficiently dry to withstand foot traffic.

STEP THREE – Application of Ammunition Magnesite

- A. When the Magnabond 3 application has been allowed to dry overnight, or when it is sufficiently dry to withstand foot traffic, the Ammunition Magnesite – a composition of magnesium chloride cement should be applied in a monolithic application.
- B. Preparation of Magnesium Chloride Solution:
In a 55 gallon drum, place two and a half (2 ½) 80 pound bags of magnesium chloride flakes and add clean potable water to make 50 gallons of solution. (This should require about 35 gallons of water). The resultant solution is usually about 6 inches from the top of the mixing drum.
- C. Mix thoroughly. Using a Baume hydrometer scale to measure the solution. Adjust solution by adding additional water or chloride, as required, to reach 21.5 Baume (upper limit is 22 Baume).
- D. Using a suitable mixing container and equipment, mix enough Magnesium Chloride solution with one bag of Ammunition Magnesite Powder to obtain a trowelable mix. This normally is about 3.5 to 4 gallons of solution per one bag of Ammunition Magnesite powder.



Application Specification

AMMUNITION MAGNESITE

- E. Prepare a “scratch coat” of a wetter mix, which is first applied over the prepared Magnabond 3 surface, followed directly by application of the Ammunition Magnesite to full thickness.
- F. Apply the normal mix (D) into the scratch coat (E). The above mix will cover approximately 16 square feet at 1 inch thickness.
- G. After about 30 minutes, Ammunition Magnesite will take an initial set, which must be then finished troweled to a smooth and compact dense surface. Apply as required to achieve the specified thickness for the application.

CAUTION: Ammunition Magnesite will reach a state that the material is too stiff to be pushed with a Darby, however, it can be moved with a trowel. Using moderate pressure the material can be dented with a finger. The material will support kneeboards over channels or support pegs may be used when necessary; the support pegs must be turned down. The resulting holes must be filled up, not just closed when support pegs are used.

- H. If the surface is too rough, a second application by trowel can be accomplished to smooth the surface. It is best to avoid the need to apply a second coat by taking care when applying the first coat.
- I. **Sealer:** Allow to cure approximately 14 days. After initial cure apply the Manufacturer’s recommended clear sealer in two coats by spray and backroll at the recommended coverage rate.
- J. **Curing:** Ammunition Magnesite is a very low-density material that can retain the magnesium chloride solution water for a long period. Normal applications can require up to 14 days before installation of finished decking systems.

GENERAL CAUTIONS:

- 1. Obtain, read and observe MSDS for the above products.
- 2. Read and follow Crossfield Products Corp. Specification for the application of all materials.

- 3. Use all recommended and required protection gear, clothing, gloves, eye protection and footwear.
- 4. Comply with all regulatory requirements with respect to work, material’s handling and clean up.
- 5. Do not apply latex mastic flooring directly over aluminum surfaces. Consult Crossfield Products Corp.
- 6. Conduct a thorough inspection of the work area, sub floor condition and soundness prior to commencing work.
- 7. All materials must be kept and stored dry. Inspect bags for signs of damage or dampness.
- 8. Magnesium oxychloride cements are affected by surface and ambient temperatures. Hot and humid conditions will cause accelerated set time.
- 9. Avoid exposure of the Chloride Solution to the heat of the sun in order to maintain generally consistent solution temperature with that of the mixing water used.

LIMITED WARRANTY

NO WARRANTY SHALL BE EFFECTIVE UNTIL THE TERMS AND CONDITIONS OF SALE SET FORTH IN CROSSFIELD PRODUCTS CORP. INVOICES ARE MET.

Crossfield Products Corp. warrants to the purchaser of its products that such products are free from manufacturing defect. Crossfield does not warrant or guarantee the workmanship performed by any person or firm installing its products. Crossfield’s obligation under this warranty is limited solely to the original purchaser and solely to the remedy of replacement in kind of any product which Crossfield sold which may prove defective in manufacture within one year from date of installation, provided said product was stored correctly and installed within the product’s shelf life, by the original purchaser and which Crossfield’s examination shall disclose to Crossfield’s satisfaction to be thus defective.

IN NO EVENT SHALL CROSSFIELD PRODUCTS CORP. BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES. THIS WARRANTY IS EXPRESSLY GIVEN IN LIEU OF



Application Specification

AMMUNITION MAGNESITE

ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR USE AND ALL OTHER OBLIGATIONS OR LIABILITIES ON CROSSFIELD'S PART, AND WE NEITHER ASSUME NOR AUTHORIZE ANY PERSON OR PERSONS TO ASSUME FOR US ANY OTHER LIABILITY IN CONNECTION WITH SALE OF A CROSSFIELD PRODUCT. THIS WARRANTY SHALL NOT APPLY TO ANY OF CROSSFIELD'S PRODUCTS, WHICH HAVE BEEN SUBJECT TO ADULTERATION, ALTERATION ABUSE OR MISUSE. CROSSFIELD PRODUCTS CORP. MAKES NO WARRANTY WHATSOEVER IN RESPECT TO ACCESSORIES, PARTS OR MATERIAL NOT SUPPLIED BY CROSSFIELD PRODUCTS CORP., WHICH ARE USED IN CONNECTION WITH ITS PRODUCTS. THE TERM "ORIGINAL PURCHASER" IN THIS WARRANTY MEANS THAT PERSON, CORPORATION OR ENTITY TO WHOM CROSSFIELD PRODUCTS CORP. SOLD ITS PRODUCTS. ANY ACTION TO ENFORCE ANY WARRANTY OR FOR BREACH OF CONTRACT OR ARISING OUT OF ANY CLAIM AGAINST CROSSFIELD PRODUCTS CORP. SHALL BE COMMENCED AND MAINTAINED ONLY IN A COURT OF COMPETENT JURISDICTION IN THE CONTINENTAL UNITED STATES OF AMERICA. THE PURCHASER ACCEPTS THESE TERMS AND CONDITIONS, AND HEREBY EXPRESSLY WAIVES ANY CLAIM TO ADDITIONAL DAMAGES.

CAUTION: ALWAYS KEEP OUT OF THE REACH OF CHILDREN.



DOT MARINE PRODUCT LINE
Crossfield Products Corp.

West Coast Office
3000 E. Harcourt Street
Rancho Dominguez, CA
90221
310-886-9100
310-886-9119 fax

East Coast Office
140 Valley Road
Roselle Park, NJ
07204
908-245-2800
908-245-0659 fax

www.dexotexmarine.com