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FREEDOMTUFF® PRODUCT INFORMATION BULLETIN

FREEDOMTUFF® 6160-FS is a100\% solids, fast setting plural component epoxy primer and sealer that dries to the touch in less than three (3) hours at @ $77^{\circ} \mathrm{F}\left(25^{\circ} \mathrm{C}\right) @ 50 \%$ R.H.

## ADVANTAGES

* 0-VOC's, 100\% Solids
* Meets USDA criteria
* No noxious odors
* Non-Blushing
* USGBC LEED, EQ Credit 4.2 AND 4.3: Low-emitting VOC

Compliant Materials

## USES

* Concrete/Masonry/Wood


## PROFESSIONAL USE ONLY

Read and understand all the information contained in the Product Information Bulletin's, SDS's and product labels prior to starting any project. Nothing contained in any of Freedom® Chemical Corporation's materials relieves the end user of the obligation to read and follow the warnings and instructions for each of Freedom® Chemical Corporation's products.

## PREPARATION

Concrete should be cured for a minimum of 28 days prior to product application and have at least 3000 psi compressive and 220 psi tensile strength.

Surface preparation is the essential first stage treatment of a substrate before the application of any coating. The performance of a coating is significantly influenced by its ability to adhere properly to the substrate material. It is generally established that correct surface preparation is the most important factor affecting the total success of surface treatment. Surfaces will be clean, dry, and sound, the presence of even small amounts of surface contaminants, dust, efflorescence, laitance, salts, curing compounds, dirt, oil, form release agents, and other foreign matter can physically impair and prevent coating adhesion to the substrate.

Shot Blast concrete between CSP 3-7.
Profile steel between 4-6 mils.
Grinding is permitted only in areas that are inaccessible to shot blasting equipment.

## PACKAGING 2:1 RATIO

1112 Gallon Kit: ( 2 gal/3.785 liters Part-A) and (1⁄2 gal/1.8925-liter Part-B).

## COLOR

Clear - Due to its chemical composition FT-6160-FS will discolor.

## COVERAGE RATES

Freedom® Chemical Corporation's coverage rates for all products are approximate and vary based on type of substrate, substrate porosity and roughness.

100 to 200 square feet per gallon ( $9.29030 \mathrm{~m}^{2}$ to $18.5806 \mathrm{~m}^{2}$ per liter), FreedomTuff® 6160-FS is applied at a theoretical 8 mils per coat $(0.2032 \mathrm{~mm}$ ) do not puddle.

## MIXING PROCEDURES

Do not mix partial containers of multi-component materials.
Do not dilute under any circumstances.
Blend 2 Parts-A with 1 Part-B by volume into a clean container.
Adequately blend FreedomTuff® 6160-FS for 3 to 4 minutes at a slow speed using a drill motor and paddle making sure not to encapsulate any air.

If necessary, add up to 1 -quart ( 0.9463 liters) of acetone per 3 gallons (11.356 liters) kit as permitted by local regulations, remix product immediately, carefully scraping the sides and bottom of the pail during mixing.

## APPLICATION

Throughout the application the sand surface must be clean and dry.
FreedomTuff(® primer is required on all substrates, except on properly prepared steel.

For optimum results proceed with application while air temperatures are between $45^{\circ} \mathrm{F}\left(7.22^{\circ} \mathrm{C}\right)$ and $95^{\circ} \mathrm{F}\left(35^{\circ} \mathrm{C}\right)$. Insure that the outside temperature is at least $6^{\circ} \mathrm{F}\left(-14.44^{\circ} \mathrm{C}\right)$ above the dew point and rising. Apply while the outside temperature is descending, high or Low temperatures and humidity can significantly affect the cure time and pot life.

After mixing thoroughly, immediately pour the FreedomTuff(® 6160-FS onto the horizontal surface and spread evenly over the entire surface using trowel or squeegee and back roll, do not puddle.

Do not apply more primer to the substrate than can be coated within four (4) hours of it becoming tack free.

FreedomTuff® 6160-FS will require mechanical abrasion once it exceeds (4) four hours.

Apply coating to FreedomTuff® 6160-FS when surface is dry to the touch.

Working time for FreedomTuff® 6160-FS is approximately 20 minutes.
If two (2) coats of Freedom® Chemical Corporation's FreedomTuff® primer is required, prime over the entire surface in enough quantity to obtain a minimum theoretical dry film thickness of 16 mils (406.4 microns). Apply the first and second coat at a rate of 200 square feet per gallon ( $18.5806 \mathrm{~m}^{2}$ per liter), in enough quantity to obtain a minimum theoretical 8 mils (203.2 microns) per coat dry film thickness. Let the first
coat of FreedomTuff® primer become tack free prior to application of the second coat.

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SPECIFICATION AND FIELD ASSISTANCE
Contact Freedom® Chemical Corporation for assistance.
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Jobsite visits by Freedom® Chemical Corporation's employees or its independent agents are solely for determining qualification for warranty.

## DISPOSAL

All spilled material, unused contents of containers, empty containers and secondary containment spills/leaks, must be cleaned up and disposed of in accordance with local, state and federal regulations.

## LIMITATIONS

The end user should check the suitability of this product and the substrate prior to its application. Freedom® Chemical Corporation assumes no liability for substrate defects.

Substrates that have previously been coated are subject to absorption, which may affect the adhesion of a new coating. Adhesion to substrate should be checked prior to starting any coating project.

FreedomTuff $®$ primers have a shelf life of 1 year from the date of manufacture, in factory-sealed containers.

FreedomTuff $®$ primers are not UV Stable.
Excess moisture vapor in concrete slabs may result in the primer and/or coating to delaminate, discolor or cause improper curing.

Coating must be applied to FreedomTuff® primer within (4) four hours of application.

PRODUCT QUALITY AND STORAGE
Shipping and storage temperatures for Part-A and Part-B should be between $45^{\circ} \mathrm{F}\left(7.22^{\circ} \mathrm{C}\right)$ and $95^{\circ} \mathrm{F}\left(35^{\circ} \mathrm{C}\right)$.

Never store directly on concrete surface, always store on pallets.
Avoid freezing temperatures.
Rotate stock regularly.
Do not open until ready to use and keep containers sealed tightly.
TESTING
Perform an adhesion test prior to starting any coating project.
Substrate adhesion test should be performed seven days after application. All testing should be performed by a qualified testing agency. Freedom® Chemical Corporation is not responsible for testing.

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MIX RATIO BY VOLUME
GEL TIME (150G MASS) @ 77 % F (25 ' C)
SET TIME @ 770
DRY TIME @ 770 F (25
PENCIL HARDNESS
MAR RESISTANCE
IMPACT RESISTANCE, INCH-LBS DIRECT/REVERSE
HARDNESS: SHORE D
TENSILE STRENGTH
VISCOSITY AT 77'F ( }2\mp@subsup{5}{}{\circ}\textrm{C}
VOLATILE ORGANIC COMPOUNDS
DRY FILM THICKNESS PER COAT
ADHESION (DRY CONCRETE)
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FREEDOMTUFF® 6160-FS TYPICAL PROPERTIES

| N/A | 2 A:1B |
| :--- | :--- |
| N/A | 10 MINUTES |
| N/A | $<3: 00(\mathrm{H}: \mathrm{MIN})$ |
| N/A | $4: 30(\mathrm{H}: \mathrm{MIN})$ |
| N/A | 3 H |
| N/A | 1.3 KG |
| ASTM D-2794 | 40 IN LB. |
| ASTM D-2240 | 83 |
| ASTM D-695 | 7550 PSI |
| N/A | COMBINED PART A AND PART B 400 CPS |
| ASTM D-3960 | 0 LB/GALLON, 0 GRAMS/LITER |
| N/A | 5 MILS/0.127MM |
| ASTM D-4541 | CONCRETE FAILED |

N/A 10 MINUTES
<3:00 (H: MIN)
4:30 (H: MIN)
3H
1.3 KG

40 IN LB.
83
7550 PSI
COMBINED PART A AND PART B 400 CPS
0 LB/GALLON, 0 GRAMS/LITER

CONCRETE FAILED

## Incredible Stuff, Exceptional Service, and Friendly People ${ }^{\text {TM }}$

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[^0]:    Read all the information in this product information bulletin, and material safety data sheet (MSDS) before applying any material. The information contained herein is for purposes of identifying the product and does not constitute a warranty or guaranty that the product will conform to this description. Product specifications and performance will vary depending on application methodologies, raw materials and other factors. All published information and specifications are subject to change without notification. Technical data shown in product data sheets are typical but reflect laboratory test procedures conducted in laboratory conditions. Actual field performance and test results will depend on installation methods and site conditions. Field test results will vary due to critical job site factors. All recommendations, statements and technical data contained in this data sheet are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not be construed as a warranty or guaranty of any kind. Satisfactory results depend upon many factors beyond the control of Freedom® Chemical Corporation. User shall rely on their own information and tests to determine suitabiilty of the product for the intended use and user assumes all risk, loss, damage, expense and liabilty resulting from their direct use, indirect use or consequential to their use of the product. Freedom® Chemical Corporation shall not be liable to the buyer or any third party for any injury, loss or damage directly or indirectly resulting from use or inability to use the product. Products manufactured by Freedom® Chemical Corporation are free of defects for a period of one (1) year, liability and buyer's remedy under this limited warranty shall not exceed the purchase price of the materials in question. $\dagger$ Freedom® Chemical and FreedomTuff® are trademarks registered in the US Patent and Trademark Office. $\dagger$ The marks of Freedom® Chemical Corporation, its divisions, slogans, emblems, other marks appearing in this document are the trademarks and/or service marks of Freedom@ Chemical Corporation, its subsidiaries, affiliates or licensors Copyrighto January 2019 Freedom@ Chemical Corporation. All Rights Reserved.

