

## PRODUCT DESCRIPTION

- Basic Use** | Southwest Type HC is a protective coating for cementitious fireproofing products used in high traffic areas susceptible to heavy physical abuse. It bonds well to the fireproofing and cures to form a hard finish coating for protecting the underlying fireproofing from accidental damage. It is used in special commercial situations, industrial applications requiring impact and abrasion resistance or harsh environmental exposure.
- Description** | Southwest Type HC is a latex-modified inorganic veneer Portland cement plaster developed specifically for application over cementitious fireproofing materials. It is non-combustible and requires only the addition of water at the job site.
- Features** |
- Non-Toxic: Portland cement plaster.
  - Durable: Hard, abrasion resistant.
  - Economical: Lower material cost per square foot.
  - Application Ease: Applied with equipment used for fireproofing.
  - Factory Mixed: Requires only the addition of water. Mixed with standard mixers.
- Limitations** | Southwest Type HC is not intended for direct exposure to weather. Contact your A/D representative for alternate product recommendations.

## SUBSTRATES & SURFACE PREPARATION

- General** | See specifications, mixing and application procedures. A/D Type HC must be applied to fireproofing that is partially wet. If the underlying fireproofing is dry then re-wet the surface with a fine water spray before applying the Southwest Type HC.
- Method** | Southwest Type HC is applied only by authorized applicators.

## PERFORMANCE DATA

| Property                          | Result               |
|-----------------------------------|----------------------|
| ASTM E605, Applied Density        | 57-67 pcf            |
| ASTM E736, Bond Strength          | Exceeds fireproofing |
| ASTM C569, Penetration Resistance | 750 psi              |
| ASTM C354, Compressive Strength   | 450 psi @ 10%        |
| ASTM D2240, Hardness              | 50                   |

## MIXING

- Mixer** |
1. Use a minimum 340 - 453 litre (12 - 16 cubic foot) heavy-duty mortar mixer capable of rotating at 40 rpm with rubber tipped blades that wipe the sides.
  2. Use continuous feed mixer. Contact A/D Technical Service for recommendation. Densities may vary when using this type of mixing equipment.
- Mixing** | Always mix with clean potable water. The mixer shall be kept clean and free of any pervious mixed materials which may cause premature setting of product. A 1-bag mix is recommended for paddle type mixers. Mix time should be approximately 1 minute at 40 rpm. Do not over mix. The material; volume should not go over center bar of mixer. Use 7.1 litres (1.5 gallon) of water per 22.7kg (50 lb.) bag. Add water to the mixer first with blades stopped. With mixer turned on, add material to the water and begin mixing. Adjust water for consistency for spraying or troweling.
- Density** | For information and recommendations obtaining the proper density and yield, contact the local A/D representative or A/D Technical Service.

**APPLICATION EQUIPMENT**

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results.

**Pumps** | This material can be pumped with a wide range of piston, rotor stator and squeeze pumps designed to pump cement/plaster materials, including:  
 Essick- model 3FM9/FM5E (Rotor Stator/2L4)  
 Putzmeister- model #S5EV (Rotor Stator/2L6)  
 Hy-Flex- model #HZ-30E (Rotor Stator 2L6)  
 Hy-Flex- model #H320E (Piston)  
 Strong Mfg.- model #Spraymate 60 (Rotor Stator/2L6)  
 Airtech- model# Swinger (Piston)  
 Mayco- model#PF30 (Dual Piston)  
 Thomsen- model #PTV 700 (Dual piston)  
 \*Marvel kit must be removed from piston pumps

**Ball Valves** | Ball valves should be located at the manifold and at the end of the surge hose to facilitate cleaning of the pump and/or hoses.

**Material Hoses** | The pump should be as close as possible to the work. This permits hose length to be minimized. Use the minimum amount of the following hose lengths.  
 Use 4.5 to 7.6 m (15 to 25 ft.) of 76mm (3") I.D. or larger surge hose from the manifold. Follow with a 406mm (16") tapered fitting to a 50mm (2") I.D. hose to the spray area. Taper to 4.5 to 6 m (15 to 20 ft.) of minimum 38mm (1½") or 25mm (1") whip hose.

**Nozzle/Gun** | Use a minimum 25mm (1") I.D. plaster type nozzle with shut off valve, swivel and air shut off valve.

**Orifice Sizes and Shields** | 9.5mm to 12.7mm (3/8" to ½") I.D. "blow-off" tips (mini-shields optional).

**Compressor** | Compressor on pump must be capable of maintaining minimum 103kPa (15 psi) and 9 to 11 cfm at the nozzle.

**Air Line** | Use 15.9 mm (5/8") I.D. hose with a minimum bursting pressure of 689 kPa (100 psi).

**APPLICATION PROCEDURES**

**General** | Thicknesses of 3.1mm-6.4mm (1/8"- ¼") can be applied in one pass. **Southwest Type HC must not be applied over dry substrate.** If previous applied base has dried, care should be taken to thoroughly re-wet the surface of the material immediately prior to application of the Hard Clad. Do not use additional water to finish Type HC. For complete application instructions, refer to the *Southwest Fireproofing Products Field Application Manual*.

**Field Testing** | Test for thickness and density in accordance with the applicable building code, *AWCI Technical Manual 12-A Standard Practice for the Testing and Inspection of Field Applied Sprayed Fire-Resistive Materials, an Annotated Guide*, and *ASTM E605 Standard Test Methods for Thickness and Density of Sprayed Fire-Resistive Materials Applied to Structural Members*.

**Finishing** | Normally left as sprayed texture finish or troweled.

**APPLICATION CONDITIONS**

| Condition | Material      | Surface       | Ambient      | Humidity |
|-----------|---------------|---------------|--------------|----------|
| Minimum   | 4°C (40°F)    | 4°C (40°F)    | 4°C (40°F)   | 0%       |
| Maximum   | 38°C (100°F). | 52°C (125°F). | 43°C (110°F) | 95%      |

\*Air and substrate temperatures shall be maintained 24 hours before, during and 24 hours after application. Contact A/D Technical Service for recommendations.

---

**CURING SCHEDULE**

---

| Surface Temp. & 50% Relative Humidity | Working Time |
|---------------------------------------|--------------|
| 25°C (77°F)                           | 30 minutes   |

\* Material must be protected from rain and running water for 24 hours.

---

**CLEANUP & SAFETY**

---

**General** | To safely use this product, read and abide by the Safety Data Sheet (SDS).

---

**MAINTENANCE**

---

**General** | No maintenance should be required. Damage caused by other trades should be patched at the expense of trade causing damage.

---

**PACKAGING, HANDLING & STORAGE**

---

**Shipping Weight (Approximate)** | 22.7 kg (50 lb.)

**Storage** | Store indoors in a dry environment between 0°C to 52°C (32°F to 125°F)

**Shelf Life** | 12 months

**Packaging** | 22.7 kg (50 lb.) bags.

Type HC™ is manufactured under license to Southwest Fireproofing™

---

**WARRANTY**

---

To the best of our knowledge the technical data contained herein is true and accurate on the date of publication and is subject to change without prior notice. User must contact Carboline Company to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. We guarantee our products to conform to Carboline quality control. We assume no responsibility for coverage, performance or injuries resulting from use. Liability, if any, is limited to replacement of products. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY CARBOLINE, EXPRESS OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Carboline® and Nullifire® are registered trademarks of Carboline Company.