

**ALTEX COATINGS**   
**FIREPROOFING**  
**SYSTEMS**

**Superior Fire Protection for Commercial Applications**



**0800 258 390**  
[www.altexfireproofing.co.nz](http://www.altexfireproofing.co.nz)



# ALTEX COATINGS FIREPROOFING SYSTEMS

**Altex Coatings is proud to bring you the most advanced fireproofing technology available.**

**Avoid expensive oversights and application issues when specifying fireproofing, choose an Altex distributed product and leave the rest up to us.**

With intumescent or lightweight cementitious coatings used to protect steel in both conventional and hydrocarbon fires, we have a full range of products to solve the toughest challenges, dramatically delaying the time it takes for steel to heat up to a critical deformation temperature.

Our in-house software and databases provide rapid, accurate and easily updated fireproofing loading information.

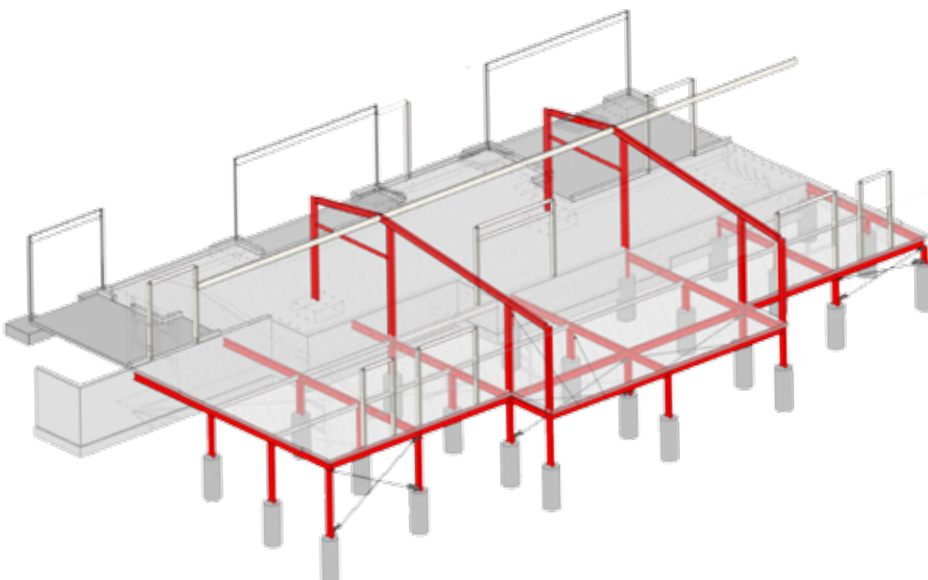
## Outstanding Technical Support

**At Altex, we don't just sell products, we provide total solutions to meet customer requirements.**

We recognise the diversity of these requirements so we go the extra mile to ensure our customers' needs are met by providing the best products, systems and service.

Often involved in the planning and design stage, our highly professional team of trained coating engineers and technical field staff collectively provide a high level of project management and support. This is supported by our applicator training seminars and comprehensive literature, both printed and in electronic format.

From initial coatings advice through to the development of accurate detailed specifications, our relationships with leading specifiers and applicators ensure the quality of our products and systems are maximised.



**Resene**  
GROUP

A Resene Group Company





## Proven Products from an Industry Leader

Carboline is a global leader in providing high performance protective coatings and fireproofing products. Our comprehensive passive fire protection line of Sprayed Fire Resistant Materials (SFRMs) and Intumescent Fire Resistant Materials (IFRMs) offer dependable and proven aesthetically pleasing solutions for commercial applications. Our global reach allows us to consistently provide the highest quality products and services to our customers anywhere in the world.

### Certifications/Listing

Our highly regarded passive fire protection products have been fully tested and qualified to meet the most current fire protection and performance standards by world-class organizations such as:



### Affiliations



# Extensive Testing & Certification

Our Southwest™ Fireproofing and Nullifire® brands have been rigorously tested and certified to trusted industry standards. These products have been subjected to a myriad of destructive exposures to simulate real world performance. Extensive 3rd party certification ensures that our products meet the fire performance and environmental requirements of commercial and light industrial assets. Our products stand the test of time and deliver cellulosic fire protection when needed.

## Fire Testing & Certification

Carboline’s Commercial fireproofing products have been certified to the following industry accepted fire test standards:

- > AS 1530.4
- > EN 13381-8:2010
- > AS 4100
- > BS 476: Part 20/21: 1987

## Environmental Testing & Certification

In addition to the fire test protocols, all Carboline industrial fireproofing products have been tested and certified to the UL Environmental Program to simulate real world exposures:

- > CO<sub>2</sub>/SO<sub>2</sub> atmospheric environment
- > 100% humidity
- > Wet, freeze, thaw cycling
- > UV exposure
- > Continuous salt spray environment

Products are fire tested after cyclic exposures to ensure they retain fire performance. Products are then classified for interior or exterior use.



# Leadership in Energy Efficient Design (LEED)

As a global leader in fire protection technology, Carboline is committed to developing and supplying products that contribute toward the design and construction of environmentally sustainable infrastructure. Our commercial fireproofing products have been formulated to meet the new LEED v4 requirements as well as local, regional and national environmental regulations. Our products can contribute towards points under the LEED Green Building Rating System in the following categories:

### LEED Credit Contributions

Category	Energy & Atmosphere	Materials & Resources			Indoor Environmental Quality
LEED Credits	EA Credit: Optimize Energy Performance	MR Credit: Construction & Demolition Waste Management	MR Credit: Building Product Disclosure & Optimization - Sourcing of Raw Materials	MR Credit: Building Product Disclosure & Optimization - Material Ingredients	EQ Credit: Low Emitting Materials
Points	1-18 Points	1-2 Points	1-2 Points	1-2 Points	1-3 Points
Carboline Products	Pyrolite® Series Southwest Type 5™ Series Southwest Type 7™ Series Southwest Type DK 3 Series Southwest Type DK 3™ Pyrocrete Series	Pyrolite Series Southwest Type 5 Series Southwest Type 7 Series Southwest Type DK 3 Pyrocrete Series Pyroprime 775 A/D Type TC-55 A/D Firefilm Series Thermo-Sorb Series Nullifire Series Thermo-Lag Series	Pyrolite Series Southwest Type 5 Series Southwest Type 7 Series Southwest Type DK 3 Pyrocrete Series Pyroprime 775 A/D Type TC-55 A/D Firefilm Series Thermo-Sorb Series Nullifire Series Thermo-Lag Series	Pyrolite Series Southwest Type 5 Series Southwest Type 7 Series Southwest Type DK 3 Pyrocrete Series Pyroprime 775 A/D Type TC-55 A/D Firefilm Series Thermo-Sorb Series Nullifire Series Thermo-Lag Series	Pyroprime 775 A/D Type TC-55 A/D Firefilm Series Thermo-Sorb VOC Thermo-Lag Series

# Fire Protection Solutions For Any Specification

The Carboline Company is a world leader in fire protection and high performance coatings. We offer the most comprehensive fireproofing package of Sprayed Fire Resistive Materials (SFRMs) and Intumescent Fire Resistive Materials (IFRMs) available from any single source. Our versatile range of products allow us to provide trusted solutions to meet and exceed any project specification and performance criteria.

**Atriums / Glass Curtain Walls**  
 > Intumescent IFRMs

**Plenum Areas / Mechanical Rooms**  
 > Commercial Density SFRMs  
 > Medium Density SFRMs  
 > Intumescent IFRMs

**Elevator Shafts / Stairwells**  
 > Medium Density SFRMs  
 > High density SFRMs  
 > Intumescent IFRMs

**Roof Deck / Roof Assembly**  
 > Commercial Density SFRMs  
 > Medium Density SFRMs

**Floor / Deck Assembly**  
 > Commercial Density SFRMs  
 > Medium Density SFRMs  
 > Intumescent IFRMs

**Parking Garages**  
 > High Density SFRMs  
 > Intumescent IFRMs

**Interior Concealed Structural Steel**  
 > Commercial Density SFRMs  
 > Medium Density SFRMs

**Perimeter Structural Steel**  
 > Commercial Density SFRMs  
 > Medium Density SFRMs

**Interior Exposed Structural Steel**  
 > High Density SFRMs  
 > Intumescent IFRMs



# Low, Medium & High Density Cementitious Fireproofing

Carboline's cementitious Sprayed Fire Resistive Materials (SFRMs) offer high performance, cost effective fire protection solutions for both concealed and exposed steel structures and assemblies. These durable, wet mix, gypsum and Portland cement based products have been formulated to meet any density specification, performance criteria and IBC building code requirements, providing specifiers the ultimate flexibility in design and construction.

## Southwest Type 5GP™

15 pcf (240 kg/m³) commercial density fireproofing with excellent application characteristics. Provides fire protection for interior columns, beams, joists, decks, walls, roofs, girders, floors and pre-cast units. **Tested and certified for fire resistance ratings up to 4 hours.**

### DESCRIPTION

Southwest Type 5GP™ is a cementitious fireproofing material in the standard density group as defined by standard industry practice.

Southwest Type 5GP™ is a development of the classic non-combustible vermiculite and gypsum combination first introduced as a spray-applied fireproofing by the Vermiculite Institute in 1959. The beneficial combination of ingredients in this formulation has been

continuously proven by use in demanding applications since then. Southwest Type 5GP™ is the fireproofing of choice to protect most structural elements in buildings. Application is economical because it is simple and easy to mix, apply and clean up. The installed material is strong, durable and reliable.

The physical properties of Southwest Type 5GP™ meet or exceed industry standards, refer to Table 1 below.

PHYSICAL CHARACTERISTICS		
Property & Test Method	Suggested Industry Standard*	Tested Values**
<b>Fire Resistance BS 476</b>	Proven in Fire Resistance Test	Passed - WFRC Report 163280
<b>Fire Resistance AS1530.4 &amp; 4100</b>	Full assessment of approved testing	Approved: BRANZ FAR 3764/FAR 3876
<b>Fire Resistance, ASTM E-119</b>	Proven in Fire Resistance Tests	Passed - up to 240 FFR (UL Designs)
<b>Density, ASTM E-605</b>	240kg/m², 15 pcf minimum, avg	240 - 272 kg/m³, 15 - 17 pcf avg
<b>Combustibility, ASTM E-136</b>	Noncombustible	Passed, noncombustible
<b>Compressive Strength, ASTM E-761</b>	57 kPa, 1,200 lb/ft²	112 kPa, 2,340 lb/ft²

PHYSICAL CHARACTERISTICS		
Property & Test Method	Suggested Industry Standard*	Tested Values**
<b>Cohesion/ Adhesion, ASTM E-736*</b>	9.6 kPa 200 lb/ft²	19.6 kPa, 389 lb/ft²
<b>Effect of Impact, ASTM E-760</b>	No cracking or delamination	Passed, no cracking or delamination
<b>Effect of Deflection, ASTM E-759</b>	No spalling or delamination	Passed, no spalling or delamination
<b>Corrosion of Steel, ASTM E-937</b>	No contribution to corrosion	Passed, no contribution to corrosion
<b>Erosion by Air, ASTM E-859</b>	Max, 0.054 g/m², 0.005 g/ft²	Passed, 0.00 g/m², 0.000 g/ft²
<b>Surface Burning, ASTM E-84</b>	Flame Spread 25, Smoke 200	Flame Spread 0, Smoke 0

\*Recommended average values, allowable individual values are typically 75 percent of average.

\*\*Values are from laboratory tests under controlled conditions and not intended to replace industry standards for specification purposes.

Note: Southwest Type 5MD has a bond strength of >430 psf @ 15 pcf, >1,000 psf @ 18 pcf and >3,000 psf @ 22 pcf.



**ASSESSED COMPLIANT TO  
AS1530.4: 2005 REF BRANZ FAR 3764**





ECONOMICAL VERY LOW VOC 15GM/LITRE ARCHITECTURAL FINISH ACHIEVABLE RAPID DRY TO RECOAT  
OPTIMISED FOR 30, 60 & UP TO 90 FRR WATERBORNE TECHNOLOGY LOW ODOUR & USER FRIENDLY

# Decorative, Intumescent Fire Resistive Coatings

Carboline's Intumescent Fire Resistive Materials (IFRMs) offer superior fire protection for commercial and light industrial projects. Our Firefilm, Thermo-Sorb, Thermo-Lag and Nullifire systems allow architects to create unique exposed steel designs with unsurpassed aesthetics, durability and performance where fire resistance ratings are required. Our versatile range of intumescent coatings provide high end architectural finishes and give project planners options to develop specifications to meet all building types, project requirements and conditions.

## Nullifire® S707 Waterborne

### ENVIRONMENTALLY FRIENDLY SYSTEM

Waterborne, halogen-free and very low VOC make the S707 range safe to use in the workplace and ideal for Green Building Construction.

S707 is ready to use (requiring no thinning) and is easy to spray. Conventional airless manual or automated spray systems may be used. S707 may be applied by roller or brush, using a 'laying on' technique to avoid heavy brush marks.

PROPERTIES	
Area of Use	Internal
S.G	1.35
Volume Solids	72% ± 3% - VOC 15grams/litre
Flash Point	NA
Colour	White
TOP SEAL REQUIREMENT	
Overcoating	Top Seal within 1 month
Building Classification	C1, C2 & C3 buildings
GENERAL	
Application Method	Airless spray, short pile roller or brush
Container Size	25kg Drum

### SMOOTH HARD WEARING FINISH

S707 dries to a smooth robust finish. This avoids the need for top seal in non-decorative areas of C1 buildings, providing even faster and more economical construction times.

### PROTECTION AND DECORATION

The S707 range of fast drying, waterborne decorative intumescent coatings are designed for on-site and off-site application. In C1 buildings not requiring a decorative finish, no top seal is necessary.

TECHNICAL	
Preparation	Onto clean dry compatible primer
WFT/Coat µm	Brush: ≤ 600   Spray: ≤ 1200
DFT/Coat µm	Brush: ≤ 430   Spray: ≤ 860
Drying Times*	24 hours between coats at >10° C
Overcoating	Minimum 24 hours at >10° C before top coat
Fire Performance	30, 60 & 90 minutes
Steel Section	Universal hollow sections and cellular beams
Certification	Tested to BS476: Part 20/21
<b>S707-60 System</b>	
30, 60, 90 minutes fire protection, achieved in a single coat. Reduces application time and overall site costs.	



**TESTED TO BS 476:  
PARTS 20 & 21**

**Nullifire®**  
Enhancing Fire Protection

## Nullifire® SC801-120 Waterborne

### ENVIRONMENTALLY FRIENDLY SYSTEM

Waterborne, halogen-free and very low VOC make the SC801-120 range safe to use in the workplace and ideal for Green Building Construction.

### SMOOTH HARD WEARING FINISH

SC801-120 dries to a smooth robust finish. This avoids the need for top seal in non-decorative areas of C1 buildings, providing even faster and more economical construction times.

PROPERTIES	
Area of Use	Internal
S.G	1.40
Volume Solids	70% ± 3% - VOC 30grams/litre
Flash Point	NA
Colour	White
TOP SEAL REQUIREMENT	
Overcoating	Top Seal within 1 month
Building Classification	C1, C2 & C3 buildings
GENERAL	
Application Method	Airless spray, short pile roller or brush
Container Size	25kg Drum

### PROTECTION AND DECORATION

The SC801-120 range of fast drying, waterborne decorative intumescent coatings are designed for on-site and off-site application. In C1 buildings no requiring a decorative finish, no top seal is necessary.

TECHNICAL	
Preparation	Onto clean dry compatible primer
WFT/Coat µm	Brush: ≤ 600   Spray: ≤ 1200
DFT/Coat µm	Brush: ≤ 430   Spray: ≤ 860
Drying Times*	24 hours between coats at >10° C
Overcoating	Minimum 24 hours at >10° C before top coat
Fire Performance	60, 90 & 120 minutes
Steel Section	Universal hollow sections and cellular beams
Certification	Tested to BS476: Part 20/21
<b>SC801-120 System</b>	
60, 90 & 120 minutes fire protection, achieved in a single coat. Reduces application time and overall site costs.	

TESTED TO BS 476: 1987  
PARTS 20 & 21

**Nullifire**  
Enhancing Fire Protection



**SELF PRIMING ON BLASTED STEEL FIRE RATING UP TO 120 MINUTES IN ONE COAT EXTERNAL DURABILITY WITH APPROVED TOPCOAT FIRE RESISTANCE UP TO 120 FRR MINUTES ON I-SECTION & HOLLOW SECTION COLUMNS ASSESSED TO AS 1530.4 & AS 4100 SUITABLE FOR ON-SITE OR IN-SHOP APPLICATION**

## **Nullifire® SC902 Waterborne, Fast-Track**

### **OPTIMISED FOR ON-SITE APPLICATION**

Fast track your on-site construction programme. One day application and rapid cure allows speedy progress on site. Coated areas can be freed early to allow un-congested progress of following trades.

### **MAXIMISE SPRAY DAYS - MINIMISE DOWN TIME**

SC902 Technology is more tolerant of ambient conditions than conventional thin film systems. It will still cure well in high humidity and at low temperatures.

### **SELF PRIMING**

May be applied directed onto AS 1530.4 Class 2½ blasted steel without the need of a primer coat. Compatible with epoxy primers aged for 3 months+. Very tolerant of poor or damaged primer and light rusting.

### **FAST TRACK APPLICATION IN A SINGLE COAT**

The unique high build nature of SC902 allows the application of sufficient paint to provide 2 hour fire protection in a single coat. With a wet film thickness up to 6.5mm in a single application, coating times can be reduced by over 60%.

<b>PROPERTIES</b>	
<b>Area of Use</b>	Internal, semi-exposed and external
<b>Steel Section</b>	Universal hollow and cellular beams
<b>Fire Performance</b>	30 to 120 minutes
<b>Build Classification</b>	C1, C2 and C3 buildings
<b>Durability</b>	ETAG 018 Part 2 Category X - External (with top seal), Category Y - Semi-exposed Category Z, Z1, Z2 - Internal
<b>Construction Phase Durability</b>	Duration - 6 months fully external without top seal
<b>TECHNICAL</b>	
<b>Touch Dry</b>	Touch dry in 1 hour
<b>Cure Time</b>	Cured in 8 hours
<b>Colour</b>	White

<b>APPLICATION DETAILS</b>	
<b>Application Method</b>	Airless spray or brush (Trowel may be used for repairs)
<b>Preparation</b>	Onto clean dry approved compatible Epoxy Primer or recently blasted steel
<b>WFT/Coat mm</b>	Up to 6.5mm
<b>DFT/Coat mm</b>	Up to 5.5mm
<b>GENERAL</b>	
<b>Pot Life</b>	Greater than 60 minutes
<b>Container Size</b>	25kg kit Part A and Part B
<b>Specific Gravity</b>	1.49 (mixed)
<b>Volume Solids</b>	85% ± 3%
<b>Flash Point</b>	Approx 250°C
<b>Approved top seals</b>	Refer to Altex Technical Services



**TESTED TO BS 476 & EN 13381-8: 2010**



**Nullifire®**  
Enhancing Fire Protection

# GLOBAL COATINGS LEADERS™

RIGHT PEOPLE · RIGHT PRODUCTS · RIGHT LOCATIONS



## NEW ZEALAND MANUFACTURING & DISTRIBUTION BRANCHES

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Fax: + 64 3 471 9250

### PACIFIC & INDIAN OCEANS

AUSTRALIA  
TAHITI  
TONGA  
FIJI  
NEW CALEDONIA  
MAURITIUS  
AMERICAN SAMOA  
SAMOA  
VANUATU

## GLOBAL MANUFACTURING PLANTS

CARBOLINE COMPANY - ST  
LOUIS  
GLOBAL HEADQUARTERS

ARGENTINA - BUENOS AIRES

AUSTRALIA - BRISBANE

CANADA - ONTARIO

CHINA - DALIAN

INDIA - CHENNAI

INDONESIA - JAKARTA

ITALY - ALGHERO

JAPAN - AMAGASAKI

MALAYSIA - JOHOR

NEW ZEALAND - TAURANGA

NORWAY - LIERSTRANDA

PUERTO RICO - SAN  
LORENZO

SAUDI ARABIA - DAMMAM

SOUTH AFRICA -  
JOHANNESBURG

SOUTH KOREA - BUSAN

THAILAND - BANGKOK

TURKEY - BURSA

UAE - DUBAI

USA - DAYTON

USA - GREEN BAY

USA - LAKE CHARLES

USA - LOUISA

VENEZUELA - CARACAS

VIETNAM - HO CHI MINH  
CITY