

SELECTION & SPECIFICATION DATA

Generic Type	Solvent borne acrylic
Description	<p>A single pack acrylic thin film intumescent basecoat for the protection of internal and semi-exposed structural steel.</p> <p>SC601 is optimised to provide 60 minutes fire resistance to 'I' section beams and columns, hollow columns and beams, as well as cellular beams, concrete filled hollows and solid steel rods. 90 minute and limited 120-minute protection is also available.</p>
Features	<ul style="list-style-type: none"> • Competitive loadings • Can be applied on-site or off-site • Easy to apply by airless spray • Suitable for exposures up to C4 environments • Can be exposed to the weather for up to 3 months once cured provided that no standing or ponding water is allowed to form • Optifire®+ unique traceability identifier • Certification: <ul style="list-style-type: none"> • Certifire CF5767 • BS476 Part 20/21 • Cellular Beams YB5 • EN13381-6 Concrete Filled Hollow Tubes • EN13881-10 Solid Steel Rods
Primers	Refer to Altex Technical Services or relevant Altex / Carboline Coating Specification for approved primer options.
Colour	Off white
Finish	Flat (with texture)
Dry Film Thickness	<p>DFT as specified on relevant fireproofing loading schedule.</p> <p>A single coat should not exceed 1000 microns wet to achieve 720 microns dry.</p>
Solids Content	By volume 72% ± 3%
Theoretical Coverage Rate	<p>1.44 m² / litre at 500 microns DFT (916 g/m² at 500 microns DFT)</p> <p>Allow for loss in mixing and application.</p>
VOC Values	As Supplied : 317 g/L
Topcoats	Selected, approved polyurethane coatings

USAGE GUIDELINES

Specifications	<p>An appropriate specification must be used for the protection of the full system in accordance with the environmental classification for the environment where the building is located. The environment during construction and transport should also be considered, if necessary, and the worst case used. Altex Coatings can assist with selecting an appropriate specification.</p>
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USAGE GUIDELINES

Environmental Resistance	<p>The construction phase environmental conditions may vary from those during the final building classifications.</p> <p>The construction phase may include higher exposure to the environment than the final classification. Each product and specification should be considered for the resistance during this construction phase including the limitations and caveats.</p> <p>During the drying phase, the intumescent must be protected from all forms of water including rain. In all cases, prolonged water contact must be avoided, including condensation, standing water, heavy running water, and fresh concrete run-off (including alkaline moisture). Exposure may lead to detrimental damage to the coating system. Any contact with water within 16 hours after application of the intumescent will have a negative effect that is likely to result in rectification being required.</p>
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SUBSTRATES & SURFACE PREPARATION

General	All surfaces should be clean, dry, and free of surface contamination.
Steel	<p><u>Optimum standard:</u></p> <p>Abrasive blast to SSPC-SP 10 (AS 1627.4 Sa 2½)</p> <p>Blast profile size: 40-75 microns.</p> <p>Prime as specified using approved primer.</p>
Galvanised Steel	Ensure all passivation coating is removed and abrade surface. Prime with compatible non-saponifiable primer.
Previously Painted Surfaces	Refer to Carboline / Altex Technical Services

MIXING & THINNING

Mixing	Power blend to a smooth homogeneous mix using a Jiffy Mixer or similar non-aerating mixer.
Thinning	Thinning is not normally required or desired; however, if conditions dictate, up to 10% Thinning Solvent #10 may be added. Note: Excessive thinning can cause low film thickness, sagging, extended dry time and other film defects.
Ratio	N/A – single component coating
Pot Life	N/A

APPLICATION EQUIPMENT GUIDELINES

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.

Spray Application (General)	The preferred method of application for Nullifire SC601 is spray.
Conventional Spray	Use only a high-capacity remote pressure pot assembly.
Airless Spray	<p>Pump: 40:1 ratio,</p> <p>Hose Diameter: Min. ¾" (9.5mm) ID</p> <p>Pressure: Minimum 3100 psi (21.4 MPa)</p> <p>Fluid Tip: 0.019" to 0.025" free-flow tip.</p> <p>20° - 40° Fan Angle</p> <p>Hose Length: Max. 30 metres</p> <p>Inline filters should not normally be used.</p>
Brush & Roller (General)	Brushing only suitable for small areas or touch-up and may result in a ribbed finish.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	5°C	5°C	5°C	0%
Maximum	+35°C	+35°C	+35°C	85%

Ensure adequate ventilation during application.
Steel surface temperature must be at least 3°C above the dew point.
At temperatures above 35°C, thermoplasticity may be observed.

CURING SCHEDULE

Surface Temp. & 50% RH	Touch Dry	Dry to Recoat	Dry to Seal / Topcoat	Dry to Handle
15°C	30 Mins	6 Hours	24 Hours	Variable depending on conditions
20°C	30 Mins	4 Hours	16 Hours	Variable depending on conditions

These figures are given as guidance only based on 300 microns dry film. Other factors such as air movement, temperature and coating thickness must be considered.

SEALER COAT USING ALTEX PRO~SEAL

Altex Pro~Seal is a specialised intumescent seal coat that allows ongoing cure of the intumescent basecoat, while enhancing weatherability and providing barrier protection against standing water, pooling, and condensation during intermediate outside storage, transport, dwell time in laydown areas prior construction and during the construction phase. Once the coating system (Primer / Nullifire SC601 / Pro~Seal) has cured hard (when the system achieves a Shore D hardness rating of 50) then the approved topcoat system may be applied.

Application of Dark Colour Topcoats: Any residual solvent retained in the film may cause blistering when dark colours are applied, and then exposed to strong sunlight via windows, atrium etc. Application of Altex Pro~Seal to ensure full hard cure (Shore D hardness rating of 50) is achieved prior to applying topcoat(s) will greatly reduce this risk to minimal levels.

CLEANUP & SAFETY

Cleanup | Clean up with Thinner #10. Hardened deposits may be removed with Thinner #10

Safety | For industrial use only: Read and follow all the caution statements on this Product Data Sheet, the product label, and the Safety Data Sheet (SDS) for health and safety information prior to use.

Ventilation | It is very important for the safety of the applicator and the proper performance of this product that good ventilation be provided to all portions of the enclosed area. It is equally important to bring into the enclosed area dry fresh air to remove all solvent vapours. Since solvent vapours are heavier than air, ventilation ducts should reach to the lowest portions of the enclosed areas as well as into any structural pockets. Ventilation should be provided throughout the cure period to ensure all the solvents are removed from the coating.


Caution | This product contains flammable solvents. Keep away from sparks and open flames. all electrical equipment and installations should be made and rounded in accordance with the National Electric Code. In areas where explosion hazards exist workers should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

PACKAGING, HANDLING & STORAGE

Shelf Life | 12 months
Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.

Packaging | 25 kg pails

PACKAGING, HANDLING & STORAGE

Storage Temperature & Humidity	Store at $\geq 0^{\circ}\text{C}$ and $+35^{\circ}\text{C}$; 0 to 95% RH. Store indoors and under cover in temperate conditions. Do not expose to extreme heat, i.e. if stored outside in shipping containers keep product away from sun heated walls. Do not freeze.
Flash Point (Setaflash)	26°C
Storage	Store under cool, dry conditions. Avoid large fluctuations between high and low temperatures. Avoid the formation of condensate due to low temperatures.
Distribution	Distributed in New Zealand by: <u>ALTEX COATINGS LTD</u> Altex Coatings Ltd, 91-111 Oropi Road, Tauranga 3112 New Zealand Phone: +64 7 541 1221
Manufacturer	 Construction Products Group Europe Tremco CPG UK Limited Coupland Rd, Hindley Green Wigan WN2 4HT UK

WARRANTY

Users should check they are referencing the latest product and safety data by checking for updates or amendments at www.altexcoatings.com.

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