



CharCoat SC

PRODUCT DESCRIPTION

CharCoat SC Structural Steel Fire Protection is the pinnacle of technology and performance in Thin Film Intumescent Fireproofing.

SC can be applied to steelwork in interior or covered exterior applications. SC fireproofing coating is spray applied and offers up to 150 minutes fire protection under UL263 and BS476: Part 21. There is no reinforcement or mesh required.

SC can be applied in residential, commercial and industrial applications where architectural designs call for a thin-film, aesthetic, highly decorative finish.

Semi exterior or covered areas can also be completed using a urethane, epoxy or water based topcoat to seal the fireproofing system. With SC's low spread rate, higher than average solids and extremely low DFT's, we can provide the most cost effective solution for all of your steel fireproofing needs.

FEATURES AND BENEFITS

- Fire rates steelwork up to 150 minutes
- Low VOC
- 20 to 30 times typical intumescent expansion
- Extremely low DFT's
- Water based intumescent coatings
- Non-Toxic / Non-Hazardous (water based)
- Most steelwork 1 or 2 coat application
- Permanent cost effective solution
- Zero maintenance required
- Single component (stir and spray)
- Brush application also available

APPLICATION AREAS

- Airports
- Stadiums and Leisure Facilities
- Office Buildings
- Retail Complexes
- Cinemas
- Residential Low and Highrise Apartments
- Atriums
- Warehousing
- Powerstations
- Mines
- Smelters
- Shipyards
- Swimming Pools (C4 topcoat)



AUTHOR	SEAN RITCHIE
VERSION	1.0
PURPOSE/CHANGES	DESIGN
DATE PUBLISHED	DECEMBER 2024

TECHNICAL DATA

Composition	Low VOC, Waterbased, NON-DG
Certification	BS476, Part 21 UL 263 GB14907-2018
Building Classification	C1 and C2 Environments
Specific Gravity	1.40 ± 0.01kg/l
Volume Solids	69% ± 3%
VOC	1 g/L
Theoretical Coverage	1800g/m ² based on an applied @ 1.0mm DFT
Colour	White / matte
Primer	Epoxy Zinc Primer or similar
Topcoat	Water-based topcoats (interior if required)
Drying Time at 25°C	2 hours (touch) 4 hours (hard dry) 72 hours full cure
Coating Intervals at 25°C	Spray min. 4-6 hours

PLEASE CONTACT US FOR OTHER PROPERTIES

PACKAGING

- 25 kg Drum
- Plastic pails
- Other sizes on request

TRANSPORT / STORAGE

Transport and storage free from frost- preferably at a minimum of +5°C to a maximum of +35°C.

SHELF LIFE

When stored at the recommended conditions, unopened pails have a shelf life of 12 months from date of manufacture.

APPLICATION GUIDELINES

For Interior applications, use SC (up to 150 minutes). Topcoats are not required for interior works, but may be needed simply for colour. For covered external works, topcoats are required. Water based topcoats, urethane or epoxy topcoats are acceptable. SC will last the life time of the steelwork if properly maintained.

GUARANTEE / WARRANTY

Please refer to our full Terms and Conditions of sale.

No liability can be accepted for the information provided in this document although it is published in good faith and believed to be correct. CharCoat Passive Fire Protection reserves the right to alter product specifications without prior notice, in line with Company policy of continuous development and improvement.

PRODUCT

FIRE RATING (MINUTES)

SC

up to 150 minutes

APPROVALS

DESCRIPTION

BS476, Part 21
UL 263

120 minutes - Structural Steelwork
150 minutes - Structural Steelwork

Product Safety



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Testing. Advicing. Assuring.



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14th December 2024

ASSESSMENT REPORT

on
The Fire Resistance Performance of Steel I-Section Beams and Columns and Hollow Columns Protected with CharCoat SC in accordance with BS 476: Part 21: 1987: Analysis at Various Design Temperatures Ranging from 350°C to 750°C.

CharCoat Passive Fire Protection
301-220 Brew Street
Port Moody BC V3H 0H6
Canada



Title:
The Fire Resistance Performance of Steel I-Section Beams and Columns, Hollow Section Columns and Beams Protected with CharCoat SC in Accordance with BS 476: Part 21: 1987: Analysis at Various Design Temperatures.

WF Report No:
379842

Prepared for:
CharCoat Passive Fire Protection
301-220 Brew Street Port
Moody BC V3H 0H6 Canada

Date:
14th December 2024

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This assessment is outside the scope of the 3rd Party certification scheme for fire protective products operated by UL International UK and shall not be used to demonstrate compliance under this scheme.

Approved Other Exova (UK) Ltd. Locations: United States, New Jersey, Middlesex, Essex, UK, United Kingdom, Reg 19(1) 2006



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