



# RAC Plus™

## *CBG Systems' next generation Lightweight SFP System*

CBG Systems has developed its next generation lightweight panelised structural fire protection system. The system extends the philosophy behind CBG's Rapid Access™ SFP range systems. Rapid Access Composite PLUS (RAC PLUS™) is an inorganic, non-intumescent and fully non-combustible panelised structural fire protection system with a focus on safety. The system has been extensively tested against the requirements of the IMO and the FTP code.

Rigorous environmental testing has been conducted on the system to verify its performance in an operational environment. RAC PLUS™ has shown successful performance against dart impact, boil testing, high humidity and temperature exposure, fog room exposure, environmental chamber testing, salt solution exposure, outdoor weather exposure, dry oven exposure up to 50°C, wet heat exposure up to 80°C, salt spray chamber exposure and UV exposure. The systems performance, in particular when benchmarked against other structural fire protection systems on the market, is evidence of its unique and highly effective physical properties.

The RAC PLUS™ panel is one of the lightest fire protection panels on the market, weighing 4.9 kg/m<sup>2</sup> +/- 10% allowing vessel to have increased fuel efficiency, speed and payload. Furthermore, the system does not require wrap factors to follow the contours of beam structures.

Although developed with a priority on safety and efficiency, RAC PLUS™ also delivers on its lightweight design and pleasing aesthetic. RAC PLUS™ panels are reversible which allows panels to be flipped by ship operators to delay replacing or re-facing compromised panel facing. The non-metallic nature of the panel provides clear benefits in terms of weight, while the semi rigid face minimizes damage to the system during vessel operation. The panels are finished with CBG Systems' typical imprint and a white finish, this reduces lighting requirements and greatly improves the look and feel of spaces installed with RAC PLUS™. RAC PLUS™ provides a global solution to SFP including engine rooms, mission bays and vehicle decks.

Please refer below to review the RAC PLUS™ technical data:



	Rapid Access Composite™	Rapid Access Stainless™	RAC PLUS™	RAC PLUS™ -Aluminium
<b>Installed Weight</b>	6.0 kg/m <sup>2</sup>	10.8 kg/m <sup>2</sup>	6.0 kg/m <sup>2</sup>	5.9 kg/m <sup>2</sup>
<b>Appearance</b>	Soft white washable finish	Stainless finish	Hard White washable finish, double sided	Hard Aluminium washable finish, double sided
<b>Fire rating</b>	60 minute Fire resisting division	A60	A60	A60
<b>Manufacturing site</b>	Partially made in Australia, the USA and Spain	Fully made in Australia	Fully made in Australia	Fully made in Australia
<b>In service maintenance</b>	Non-destructive	Non-destructive	Non-destructive	Non-destructive
<b>Lifespan</b>	Facing may deteriorate	Insulation may deteriorate	Can be double sided to increase service life of facing.	Can be double sided to increase service life of facing.
<b>Resistance to corrosion</b>	Aluminium Honeycomb panel	316 Stainless steel panel	Panel is metal free	Panel is metal free
<b>Test Data</b>	FTP Code Part 3 Fire Tested FTP Code Part 10 Fire Tested	FTP Code Part 3 Fire Tested	FTP Code Part 3 Fire Tested CSIRO Boil Test CSIRO Fog Room exposure CSIRO High Temperature/Humidity CSIRO Environmental Chamber CSIRO Salt Solution Immersion CSIRO Outdoor Weather exposure CSIRO Salt Spray Chamber CSIRO UV-exposure test	FTP Code Part 3 Fire Tested CSIRO Boil Test CSIRO Fog Room exposure CSIRO High Temperature/Humidity CSIRO Environmental Chamber CSIRO Salt Solution Immersion CSIRO Outdoor Weather exposure CSIRO Salt Spray Chamber CSIRO UV-exposure test
<b>Air gap</b>	Deck: 300 mm Bulkhead: 150 mm	Deck: 300 mm Bulkhead: 150 mm	Deck: 300 mm Bulkhead: 150 mm	Deck: 300 mm Bulkhead: 150 mm
<b>System thickness additional to airgap</b>	16.5 mm panel (38 mm maximum system thickness)	70 mm maximum system thickness	20 mm panel (38 mm maximum system thickness)	20 mm panel (38 mm maximum system thickness)
<b>Grid Size</b>	2400 mm x 1200 mm	1200 mm x 900 mm	2400 mm x 1200 mm (VD) 1200 mm x 1200 mm (ER)	2400 mm x 1200 mm (VD) 1200 mm x 1200 mm (ER)
<b>Certification</b>	MED B+D (DNV GL) and USCG	MED B+D (DNV GL) and USCG	MED B+D (DNV GL) and USCG	MED B+D (DNV GL) and USCG

