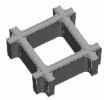
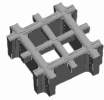




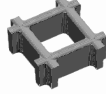
FIRE SAFETY MATRIX FOR FIBERSTRUCT MOULDED GRP GRATINGS
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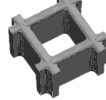
38x38mm
26mm



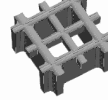
19x19mm
30mm/Micromesh



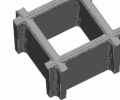
38x38mm
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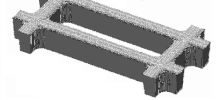
38x38mm
38mm



19x19mm
38mm/Micromesh



51x51mm
50mm



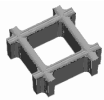
38x154mm
38mm

APPROVED OFFSHORE & MARINE APPLICATIONS

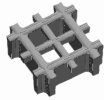
LOCATION	SERVICE	LEVEL	APPLICABLE FIBERSTRUCT GRATING	
		ACCORDING US COAST GUARD, DNV & ABS	ISO-FR ISO-XFR VE-FR VE-XFR MD-XFR, PH-XFR-B	PH-XFR-A
	Type Approval		DNV	USCG
Machinery Spaces	Walkways or areas which may be used for escape, or access for fire fighting, emergency operations or rescue	L1	NO	NO
	Personnel walkway, catwalks, ladders, platforms or access areas other than those described above	L3	NO	YES
Cargo Pump Rooms	All personnel walkways, catwalks, ladders, platforms or access areas	L1	NO	NO
Cargo Holds	Walkways or areas which may be used for escape, or access for fire fighting, emergency operations or rescue	L1	NO	NO
	Personnel walkway, catwalks, ladders, platforms or access areas other than those described above	NONE	ALL	YES
Cargo Tanks	All personnel walkways, catwalks, ladders, platforms or access areas	NONE	ALL	YES
Fuel Oil Tanks	All personnel walkways, catwalks, ladders, platforms or access areas	NONE	ALL	YES
Ballast Water Tanks	All personnel walkways, catwalks, ladders, platforms or access areas	NONE	ALL	YES
Cofferdams, void spaces, double bottoms, pipe tunnels, etc.	All personnel walkways, catwalks, ladders, platforms or access areas	NONE	ALL	YES
Accommodation, services, and control spaces	All personnel walkways, catwalks, ladders, platforms or access areas	L1	NO	NO
Lifeboat embarkation or temporary safe refuge stations in open deck areas	All personnel walkways, catwalks, ladders, platforms or access areas	L2	NO	YES
Open Decks or semi-enclosed areas	Walkways or areas which may be used for escape, or access for fire fighting, emergency operations or rescue	L3	NO	YES
	Personnel walkway, catwalks, ladders, platforms or access areas other than those described above	NONE	ALL	YES



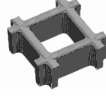
FIRE SAFETY MATRIX FOR FIBERSTRUCT MOULDED GRP GRATINGS
www.fiberstruct.com



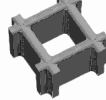
38x38mm
26mm



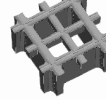
19x19mm
30mm/Micromesh



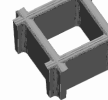
38x38mm
30mm



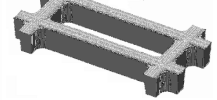
38x38mm
38mm



19x19mm
38mm/Micromesh



51x51mm
50mm



38x154mm
38mm

Gangway for safe access to bow on tankers according to IMO MSC.62(67)

L3

NO

YES

RECOMMENDED ONSHORE REFINERY & TUNNEL APPLICATIONS

LOCATION	SERVICE	LEVEL	AVAILABLE TYPES	
		LOCAL & NATIONAL REQUIREMENTS	FD/ISO-FR, VE-FR, ISO-XFR, VE-XFR MD-XFR, PH-XFR-A, PH-XFR-B	
Inside Machinery Spaces	Walkways or areas which may be used for escape, or access for fire fighting, emergency operations or rescue	LOCAL & NATIONAL REQUIREMENTS	NO	YES
	Personnel walkway, catwalks, ladders, platforms or access areas other than those described above		ALL	ALL
Tunnel and Underground areas	All personnel walkways, catwalks, ladders, platforms or access areas		NO	YES
Open Plant areas	Walkways or areas which may be used for Personnel walkway, catwalks, ladders, platforms or access areas other than those described above		NO	YES
			ALL	ALL
Cargo & Fuel Tank Parks	All personnel walkways, catwalks, ladders, platforms or access areas		ALL	ALL

Resin Characteristics	All Fiberglass resins selfextinguishing according ASTM-E84	Flame-spread	Smoke Index	Toxic emissions	Recommended for tunnels
ISO-FR	isophthalic polyester	25	345	very low	NO
VE-FR	vinylester	20	360	very low	NO
ISO-XFR	isophthalic polyester special grade	15	920	very low	NO
VE-XFR	vinylester	10	970	very low	NO
ECO-FR	ortophthalic polyester	35	650	very low	YES (*)
MD-XFR	modified acrylic	15	45	very low	YES (*)
PH-XFR-B	standard phenolic	5	10	BS 476	YES (*)
PH-XFR-A	heavy duty phenolic	5	10	BS 476	YES (*)

(*) Due to extreme low smoke emissions & low toxic emissions