

HIGH-PERFORMANCE PROTECTION

STADIP® LITE

Weight-saving solution

vetrotech
SAINT-GOBAIN

ABOUT US

High-performance safety glass is our specialism.

As the world's leading glass manufacturer with a dedicated sales office for the marine industry, Vetrotech can provide tailor-made products with an array of advanced functionalities to suit your needs: from fire resistance to acoustic insulation; from weight and energy saving to solar control and privacy – or virtually any combination of these. Vetrotech can offer multi-functional products of exceptional German quality to tackle any marine requirement.

There are few environments more unforgiving than the high seas. Our innovative Stadip® Lite solutions are specifically designed to reduce weight without compromising on structural strength, resulting in thinner and lighter glass solutions and creating better visibility. More information about the different composition profiles and options will be given in this brochure.

STADIP® LITE

Weight savings up to 41.7%

Stadip Lite offers the biggest benefits when used for applications close to sea level. Calculated nominal glass thicknesses can be replaced by a solution that uses specially laminated glass, meeting structural strength and deflection level requirements.

The product range - select the optimal composition

According to applicable standards, ship engineers must calculate the minimum glass thickness required for each individual window. This list is then provided to window suppliers working in cooperation with the glass manufacturer, and a composition profile is selected. However, when working with set glass thicknesses (6, 8, 10, 12, 15, 19 and 25mm), outcomes are not always optimum.

For example: if the glass thickness is calculated to be 19.4mm, a minimum glass thickness of 25mm needs to be used. Often, a certain U-value, colour or G-factor is required, but as these thicker glasses are not available with a coating or colour, the only option is to add an extra pane to hold the coating. This results in an even thicker lamination; a minimum thickness of the pressure pane will be 25 + foil + 6 = 32mm. Using the new Stadip® Lite glass solution, the composition could be brought down to 20mm total, including a high-performance coating with a saving of 34.5%.

Possible combinations

- Coloured films
- Tinted glass, ParSol®
- Heated glass, Thermovit®

As a double glazing unit:

- Fire-resistant glass, Contraflam® (lite) Marine and Pyroswiss® Marine
- Heated glass, Thermovit®
- Solar protection coatings, KM Ultimate range
- Bullet-resistant glass, Vetrogard®
- Sound reduction

To find your optimal combination and further info about the full-range of capabilities, contact your Vetrotech representative.

STAMPS

Indicators of high-quality

All glass products manufactured by Vetrotech Marine are marked with a product stamp, which indicates that the products comply with all comfort and safety standards. Additional customer stamps can also be applied on request.

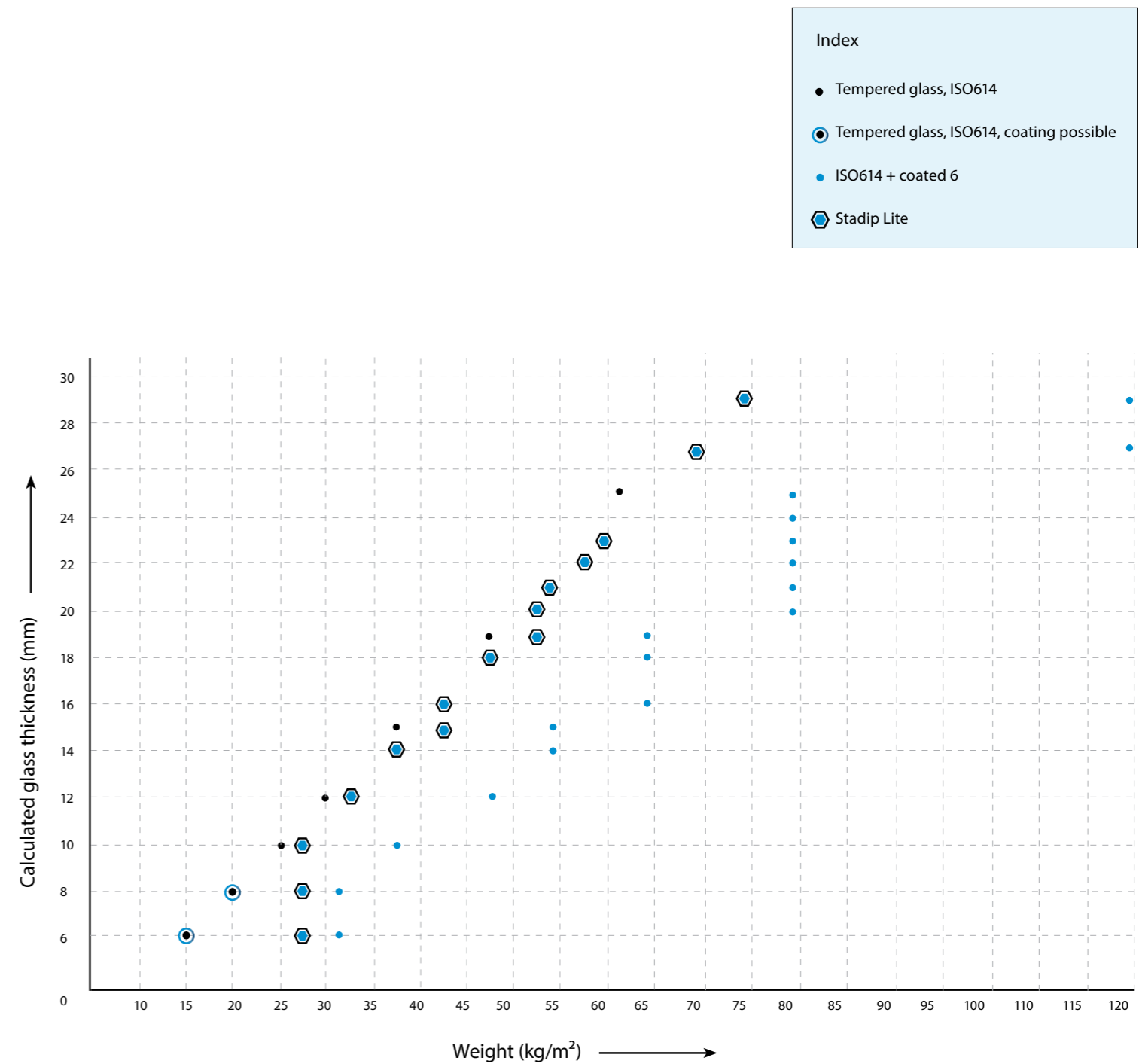


OVERVIEW

Weight savings at a glance

Nominal glass thickness	Conventional tempered glass solutions				Stadip Lite compared to		Weight savings	
	Tempered glass	Weight	Coated glass	Weight	Composition	Weight	Tempered glass	Coated glass
	mm	kg / m ²		kg / m ²			%	%
	Symbol in the graphic at page 5 ● ●		Symbol in the graphic at page 5 ●		Symbol in the graphic at page 5 ⬡			
6	6	15	6 / film / 6	32,3	4 / film / 6	27,3	- 82	15,5
8	8	20	6 / film / 6	32,3	4 / film / 6	27,3	- 36,5	15,5
10	10	25	8 / film / 6	37,3	4 / film / 6	27,3	- 9	26,8
12	12	30	12 / film / 6	47,3	6 / film / 6	32,3	- 8	31,7
14			15 / film / 6	54,8	8 / film / 6	37,3	1	31,9
15	15	37,5	15 / film / 6	54,8	10 / film / 6	42,3	- 13	22,8
16			19 / film / 6	64,8	10 / film / 6	42,3	11	34,7
18			19 / film / 6	64,8	* 12 / film / 6	47,3	0	27,0
19	19	47,5	19 / film / 6	64,8	12 / film / 8	52,3	- 10	19,3
20			25 / film / 6	79,8	12 / film / 8	52,3	16	34,5
21			25 / film / 6	79,8	15 / film / 6	54,8	12	31,3
22			25 / film / 6	79,8	12 / film / 10	57,3	8	28,2
23			25 / film / 6	79,8	15 / film / 8	59,8	4	25,1
24			25 / film / 6	79,8	12 / film / 12	62,3	0	21,9
25	25	62,5	25 / film / 6	79,8	19 / film / 6	64,8	- 4	18,8
27			25 / film / 15 / film / 6	119,8	19 / film / 8	69,8	NA	41,7
29			25 / film / 15 / film / 6	119,8	19 / film / 10	74,8	NA	37,6

The differences in a graphic





The Stadip® Lite glass solutions offer the engineer the possibility to take control over glass weight savings on the ship.

Key benefits - in comparison with conventional glass solutions

Safer

As a result of the laminates used, the internal glass of Stadip® Lite remains intact when impact of a firm material occurs to the external side of the glass, whereas monolithic tempered glass will fragment when broken. This keeps cabins and public spaces watertight and operational at all times.

Lighter

Weight savings on the glass can be achieved 41.7%, and as a result of the thinner composition, additional savings can be achieved with the frame and steelwork.

Cost effective

Having less weight contributes to a more sustainable ship.

Clear visibility

Using Stadip® Lite offers a better optical quality of vision due to the lamination selected.

Design freedom

The structural strength that Stadip Lite brings allows it to be used in larger panes, and so minimises limitations, allowing designers to create objects freely while still complying with all required regulations.

Certification



Thanks to the Stadip® Lite product range and its compliance with the minimum deflection levels, Lloyd's Register has awarded the product with a certification status. Specific project approval is available on request.



CHECK OUR WEBSITE

for an overview of our product range, news facts, downloads of our product brochures and specifications.

www.vetrotech-marine.com



Vetrotech Marine is part of the Saint-Gobain group, the world leader in materials and solutions for living places.

Picture credits: Olaf Rohl, Mike Louagi

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