## Brombach + Gess - Your Specialist for:

- Glued Glass Facade
- · Glass Sliding Door integrated into the Facade
- Frameless Sliding Window
- Panoramic Glass Sliding Roof
- Windscreen, Balustrades and Partitions
- Fire-Resistant Glazing
- Glass Dome
- Skylights which can be opened
- Special Glasses
- DUROmare Safe & Light
- NEW! Loggia-Cabin Window System
- NEW! Glass Sliding Roof out of Composite Structure

For any further questions and information, please do not hesitate to contact us.



**DURO**mare - Safe & Light

Laminated safety glass -

especially developed for maritime needs

marine glazing
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APPROVAL CERTIFICATE

## DUROmare

Brombach + Gess, in collaboration with the glass finisher Hero-Glas, has developed and licensed DUROmare laminated safety glass especially for maritime requirements. Laminated safety glass made from DUROmare can withstand higher pressure loads than a monolithic single pane.

As a result, glass thicknesses can be significantly reduced, particularly where high load requirements result in glass thicknesses which are not available as single panes and therefore have to be manufactured as laminated glass.

Inter layer out of polyvinyl butyral (PVP) cannot assign loads lossless from one glass layer to another. Therefore conventional laminated safety glasses have to be stronger dimensioned as the equivalent mono panes.

DUROmare Glass arises through high-grade, thermally toughened single glasses which is consolidated with an Inoplat inter layer to a laminated safety glass. This new laminate can hold the load as a comparable single pane.



This results in beneficial properties for shipyards and shipping companies:

## **WEIGHT**-saving

The thickness of the glass and thus the total weight of a glazing unit can be significantly reduced with DUROmare.



Solar-filtering and heat protection requirements as well as sophisticated insulation can be factored into the DUROmare glass. In the following example, we compare standard insulating glass with solar-filtering and heat protection properties with type 86 DUROmare.



## **CHARACTERISTICS**

in comparison

DUROmare (proofed by DNV GL)				
Туре		Size (mm)	Weight (kg/m²))	Proof loading (KN)
64		11,52	26,44	15,5
	Reduction	-4,0%	-11,9%	
66		13,52	31,44	24
	Reduction	-9,9%	-16,2%	
86		15,52	36,44	33,4
	Reduction	-18,3%	-23,3%	
126		19.52	46.44	53
	Reduction	-21.9%	-25.7%	

Tempered safety glass (single pane)					
Size (mm)	Weight (kg/m²))	Proof loading (KN)			
12	30	15,5			
15	37,5	24			
19	47,5	33,4			
25	62.5	53			

