



ADECO'S

ESC

CONCEPT



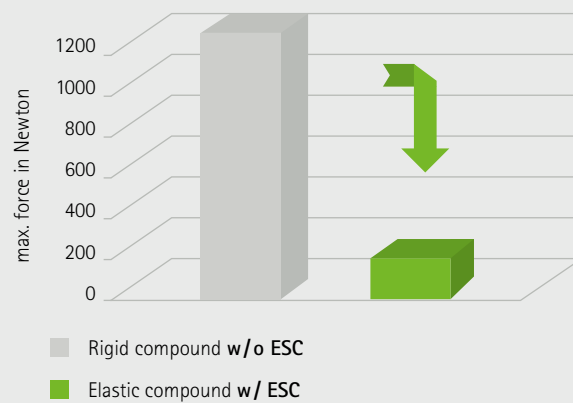
Elastic Sandwich Compound

adeco  esc®

## The ESC concept

- The patented elastic sandwich compound for panels installed in exposed positions or coated in dark colours.
- The elastic sandwich concept minimises the forces emanating from strong sun radiation or extreme cold.
- The increased resistance is due to cellulose inserts in the foam core.
- Available for aluminium panels  $\geq 36$  mm total panel thickness.

### Comparison of forces at maximum deformation



Case study: 48 mm sandwich panel, 3 mm aluminum sheeting outside / 43.5 mm foam core w/o ESC / 1.5 mm aluminum sheeting inside  
 Measured values as a function of the temperature (approx. 70°)  
 (Diagram according to EPH certificate PT-19-02-15-01)



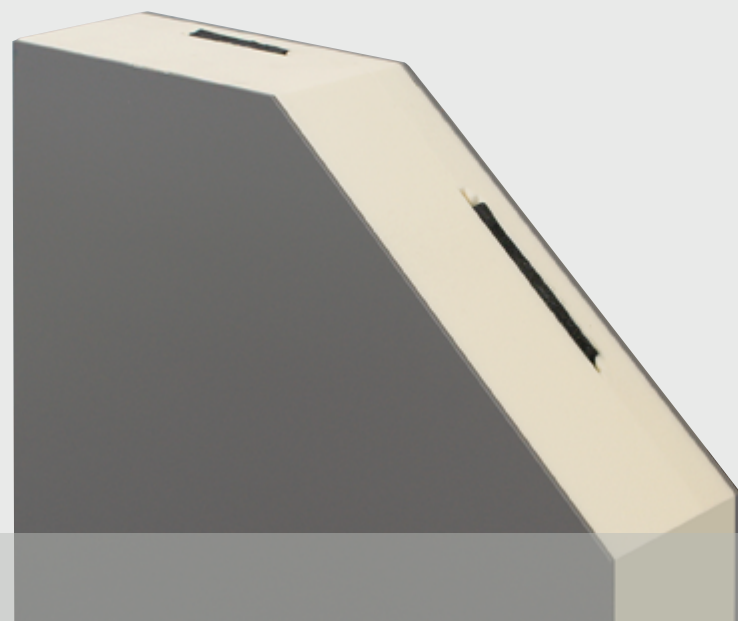
Based on the increasing demand for entrance doors with improved insulation values in recent years, the design depths of profiles and thus the total thickness of panels have become much greater. The optimised thermal insulation properties also have an effect on the entrance door, especially when it comes to closed panels coated in dark colours and installed in exposed positions. Depending on the design and the material of panel and profile, reciprocal effects may occur, leading to a possible warping of the entire door sash.

The patented (EP 3 593 989) elastic sandwich compound (ESC concept) takes up and considerably reduces the forces emanating from strong sun radiation and extreme temperatures. The increased resistance is due to cellulose inserts in the foam core. Especially closed entrance door panels and those with small glazed inserts thus benefit from an increased reduction in forces. Therefore, we strongly recommend opting for the elastic sandwich compound for these models.

Think about the next summer/winter already now. ESC, the elastic sandwich concept for exposed positions and dark colour coatings.

## THE ESC CONCEPT





## ESC – open your front door easily and conveniently

The enhanced thermal insulation values of modern front doors create new requirements on their structural design.

Do you know this situation?

You return home with your basket full of groceries and want to unlock your front door but – you need a second hand to be able to open it. So you put your basket down, unlock the door and then lift the basket again ...

The elastic sandwich compound ESC absorbs and significantly reduces the forces emanating from sun radiation or extreme temperatures. Your front door can be opened with one hand, easily and without much effort.







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Would you like to get more information on adeco's ESC concept? Please contact your adeco sales representative.

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Elastic Sandwich Compound

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