

Feel safe.

DIN EN 14428 and the requirements arising from it for the production of shower enclosures.

As soon as the product development department deals with a new shower enclosure, DIN EN 14428 is the guideline for the development.

The German Industrial Standard DIN EN 14428 defines the qualitative and safety-relevant product requirements. Specifically, we will deal with the subarea "5.6 Stability", which explains the behaviour of the shower enclosure in the event a person collides with it.

In the EU today, there is a drive to harmonise national standards. Standards adopted at European level are identified by the abbreviation EN. National standards, such as the DIN standard, are also given a corresponding supplement.

A DIN-EN standard thus means that a standard that was originally German will in future appear as European. This usually makes no difference in terms of content. An EN standard is adopted by a board consisting of three European committees.



Secure fastening according to DIN EN 14428.



The force simulated with the pendulum swing corresponds to the following scenario for a better understanding:

If the well-known actor Ralf Moeller (Gladiator / 142 kg) were to lose his balance whilst washing his feet and fall against the shower enclosure, it will withstand the forces acting on it without shattering.

Standarddized Pendulum Impact: Energy of 135 joules Energy = $\frac{1}{2}$ × Mass × (V speed in m/s)² 135 joules = $\frac{1}{2}$ × 142 kg × (1.38 m/s)² We devote a great deal of attention to testing the glass as well as any framing that may be present. This ensures that the product does not fall over in the event of a collision between man and shower enclosure. So that the situation can be simulated, every product development is subjected to a what is known as a pendulum impact test before the start of series production.

This pendulum impact is performed under real conditions. A 50 kilogram pendulum is struck against the shower enclosure in a defined sequence. The forces acting on the bonded or framed glass show whether the product can withstand this load.

After this procedure, the bonding or framing is examined for possible cracks and material changes. If there are no complaints, the test is considered passed and the product is safe.

Would you like to get more informations about safety or do you have any questions? You will find further information on our website.

www.duscholux.com/safety