	Project sheet
Research project :	Basis of Glass Design Codes
Images :	Requirements for technical specifications $R_{d} = m_{\mathbb{R}} \exp(-3.03 \cdot S_{\delta})$ $R_{k} = m_{\mathbb{R}} \exp(-1.65 \cdot S_{\delta})$ $\gamma_{M} = \frac{R_{k}}{R_{d}}$ Requirements for fabrication of prefabricated products and works Glass product, PVB-foil, connection materials $\text{Tests with representative large scale}$ $\text{prefabricated components}$ Evaluation of tests according to EN 1990
Keywords :	Glass, Code, Design, Harmonization
Researchers involved :	- WELLERSHOFF, Frank; SEDLACEK, Gerhard; KASPER, Ruth
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Time span :	Since 2001
Description :	For glass structures the standardisation is not yet completed; therefore there is a need to look into the basis of design to be able to decide in what way innovative solutions may be realised by appropriate engineering judgements with or without the guidance of codes. The legal basis for design is the "Construction Product Directive" now implemented in all member states of the EU, that gives "essential requirements" for constructions products to be built in a structure. These essential requirements are e.g. "mechanical resistance and stability" and resistance to "fire". The Eurocodes giving unified design rules which are deemed to satisfy the essential requirements of the Construction Product Directive. They are written in such a way that they are suitable for calculating the technical properties of prefabricated components so that these calculations are accepted all over Europe (i.e. characteristic values of strength, dimensions, etc.) and also for designing construction works to be built on a particular territory. For construction works design rules are needed that are derived from the European unified characteristic values by applying a "nationally determined parameter", e.g. a partial factor $\gamma_{\rm M}$ only applicable on the territory where the building is built.
Most important publications :	 Sedlacek, G.; Wellershoff, F.; Kasper, R.: Basis of design and codes for glass structures; Intelligent Publication Limited, Intelligent Glass Solutions, Issue 1- 2004, page 47-49
Working group :	WG 2. Material characterization and material improvement
Category:	TG 5: Glass strength and aging of glass
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