	Project sheet
Research project :	Glass Columns and Glass Walls
Images :	
Keywords :	Glass, Column, Buckling, Shear, Stabilization
Researchers involved :	- WELLERSHOFF, Frank; SEDLACEK, Gerhard; SCHMITT, Felix; SENDELBACH, Michael
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Time span :	Since 1999
Description :	In 2000 the Glass Pavilion in Rheinbach was the first building where all vertical and horizontal loads are carried by columns made entirely of glass. For this application a special approval of the relevant regulatory authority had to be granted. The safety concept developed includes scenarios with exceptional loads like human impact or vandalism. Therefore full scale tests were conducted to determine the stability of the glass columns under all possible load cases and pre-damage conditions. In 2010 glass walls were design and tested for the projects "Willy Brandt Platz" in Frankfurt and "Kravis Center, Living Room" in Los Angeles.
Most important publications :	 Wellershoff, F.; Sedlacek, G.: Glass Pavilion Rheinbach – Stability of Glass Columns; Proceedings of the Glass Processing Days 2003, page 316-318 Wellershoff, F., Sendelbach, M.; Schmitt, F.: Glass Columns and Glass Beams – Projects of 2010, engineered transparency at glastec 2010. Conference Proceedings, page 349-357
Working group :	WG 4. Novel glass assemblies
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