

DIN EN 12046-1:2020-11 (E)

Operating forces - Test method - Part 1: Windows

Contents		Page
European foreword		3
1	Scope	4
2	Normative references	4
3	Terms and definitions	4
4	Principle of test	4
5	Apparatus	5
5.1	Test rig	5
5.2	Linear motion	7
5.3	Rotary motion	7
6	Test specimen	7
7	Conditioning and preparation of the test specimen	8
7.1	Conditioning	8
7.2	Preparation	8
8	Procedure	8
8.1	Test sequence	8
8.2	Rate of loading	9
8.3	Disengagement of hardware	9
8.4	Measurement of the manual force(s) to operate the casement or sash	9
8.4.1	For all windows with the exception of vertical sliding windows	9
8.4.2	For vertical sliding windows	9
8.5	Full engagement of closing and locking hardware	11
9	Expression of results	11
10	Test report	11