

Load Span Tables for Adek 20 & Adek 30

We recommend a maximum span of 600mm for Adek 20 and 1200mm for Adek 30.

Following these guidelines you ensure that your structure comply with the requirements for different flooring media as per 'BS EN 1991-1-1:2002 Actions on Structures - Imposed Loads for Buildings'.

Table 1. Adek A20 & Adek A30 point loads tested at different spans.

SPAN (mm)	Adek 20		Adek 30				
	400	600	400	600	800	1000	1200
Deflection @ 2kN (mm)	0.6	1.5	0.4	1.2	1.8	2.8	4.0
Deflection @ 3kN (mm)	0.9	2.2	0.7	1.6	2.6	4.0	5.9
Deflection @ 4kN (mm)	1.2	2.9	0.9	2.1	3.3	5.4	7.9
Deflection @ 5kN (mm)	1.6	3.6	1.2	2.5	4.1	6.8	9.9

Table 1 shows deflection of both Adek A20 and Adek A30 at different spans at a point load of 5kN.

Table 2. Point loads requirements for different flooring media (BS EN 1991-1-1:2002).

BS EN 1991-1-1:2002 Actions on structures - Imposed loads for buildings	Point Load kN (mid-span)
Balconies	2.0
Walkways – Light duty	2.0
General residential	2.0
Offices for general use	2.7
Public, institutional and communal dining rooms and lounges, cafes and restaurants	3.0
Classrooms	3.0
Assembly areas with fixed seating	3.6
Walkways – General duty	3.6
Assembly areas without seating, concert halls and bars	3.6
Shopping areas – General	3.6
Stairs & landings in all buildings incl. hotels & institutional buildings subject to crowds	4.0
Corridors, hallways, aisles, in all buildings incl. hotels & institutional buildings subject to crowds or wheeled vehicles incl. trolleys	4.5
Walkways heavy duty (high density pedestrian traffic including escape routes)	4.5
Stages in public assembly areas	4.5

Table 2 shows an extract from BS EN 1991 that demonstrates what point loads the flooring media should be able to support. These loads are mid-span live loads. Dead loads should be supported in a different manner whereby the load is spread over the support beams to ensure long term board deflection is prevented. If in doubt, please contact our technical department for further information.

It is also important to ensure you design your substructure to comply with the uniformly distributed load (UDL) values (commonly expressed in kN/m²), which are also expressed in BS EN 1991.