

New e-slide and e-straight joints

As market innovators of jointing solutions for industrial concrete floors, HCJ has focused and invested strongly in R&D over the last couple of years. Intense testing and research into the Cosinus Slide® technology gave us a strong and deeper insight into joint characteristics and behavior. As a consequence, we have used this knowledge to improve and perfect our existing product range by developing the e-slide and e-straight joints. These joints will now take the place of our traditional Delta and Omega joints, as well for the straight as for the sinus joints.

You can see in the table below the major improvements this will make concerning the savings in weight, the elimination of system related vertical tolerance and vertical displacement, as well as the very important load transfer capacities. Those characteristics determine the functionality and the efficiency of the joint and are crucial when selecting the right joint for the right application.

All values in the following table are for joints that fit to a slab thickness of +/- 200 mm.

	Cosinus Slide®	e-slide	e-straight	Delta	Omega	plate dowel joints*
length per piece	2,60 m	2,60 m	2,60 m	3,00 m	3,00 m	2,0 - 3,00 m
weight	15,16 kg/m	8,91 kg/m	8,07 kg/m	25,73 kg/m	20,69 kg/m	11 - 17 kg/m
weight/piece	39,42 kg	23,17 kg	20,99 kg	66,90 kg	53,79 kg	26 - 37 kg
system-related vertical tolerance	NO	NO	NO	YES	YES	YES
vertical displacement at 50 kN**	+/- 0,15 mm	+/- 0,15 mm	+/- 0,15 mm	+/- 0,7 mm	+/- 0,6 mm	+/- 0,6 mm
maximum transferable load***	135 kN	113 kN	113 kN	100 kN	98 kN	+/- 50-60 kN
recommended maximum opening	15 mm					-

*the values for plate dowel joints are average values from different joint types tested. The different types and shapes also lead to slightly different results. Please consider this when comparing to suppliers data.

**the values are taken from different laboratory testing. They do not include any additional value linked to the system-related vertical tolerances in some of the systems.

***Attention: Those values come directly from laboratory testing and do not include any standard deviation or safety factors. Those values are not suitable to be used for ultimate limit state structural design checks.

A detailed structural design check will prove which joint is the right one for your project! You can run a preliminary design check using our free online tool here: <https://designer.hcjoints.eu>. For a complete and free of charge design check, please fill in the necessary data on the online form here: https://www.hcjoints.be/en/technology/calculation_request or send the project information you have to dirkvc@hcjoints.be.

In case of any question or if you require assistance for your project, please feel free to contact our sales partners (https://www.hcjoints.be/en/sales_partners) or us personally.

Best regards,



Dirk Van Cauteren

CCO & Head of technical support