

# I-OSB™

WOODEN BEAMS



- suitable for solid structures of large span ceilings
- provide easy solution for installation of distribution system
- low weight and easy handling
- provide minimum thermal bridges of walls and roofs
- standard and individual dimension offered
- ETA 16/0917 certification

Building structures must comply to increasingly stricter standards. Particularly high demands are put on thermal and technical parameters as well as environment. Also, demands of architects, who design spacious rooms with large ceiling spans, increase. In this regard, the effective solutions are construction elements for structures of walls, ceilings and roofs i.e. I-OSB™ wooden beams.

The I-OSB™ wooden beams can be used for all types of structures including wooden houses or when dealing with sub-structures using classic technologies. They can be applied also in case of revitalization of old buildings. CZECH PAN offers the beams of a wide range of standard dimensions, however, the production can be adapted to almost any individual requirements of the clients.

## LIGHT, STABLE AND FOR BIG STRUCTURES

The flange plates of the I-OSB™ beams are made of dried and wrought soft wood with finger joints. OSB board, which is joined by glued wedge joints with the flange plates, is used for the



foto NES, s.r.o.



photo CONTI PAN, s.r.o.

web. The beams are manufactured on a special line with continuous quality control to ensure very high quality. Contrary to traditional massive wooden beams, the I-OSB™ wooden beams are stable in shape and lighter. In addition, they can convey high loads also for large construction dimensions, such as ceilings and roofs. In addition, the beams can be easily handled and processed. This makes assembly quicker and substantially cheaper.

## THE DISTRIBUTION SYSTEMS WITHOUT NO EXTRA COSTS

With the ceiling structures made of traditional beams it is not possible to use the ceiling cavity for installation of distribution systems of larger dimensions, such as sewer piping, ventilation etc. Therefore, it is necessary to build expensive structures of suspended

ceilings or installation wall chases. This is not necessary for the I-OSB™ beams through which lateral passages can be constructed. This makes installation of the distribution system simple and unexpensive.

## IMPROVED ENERGY SAVINGS AND SAFETY

For perimeter structures - like walls and roofs - improved, better quality insulation materials are used, and they improve energy balance of completed buildings. In this regard, the structural components of the building play an important role, such as roof frames and wall posts. The I-OSB™ wooden beams achieve better results when compared to standard beams like KVH Profiles. In addition, they eliminate risk of condensate and eliminates thermo-bridging. Therefore, the perimeter structures of buildings designed from the I-OSB™ wooden structures are safer, energy efficient and cost controlled!

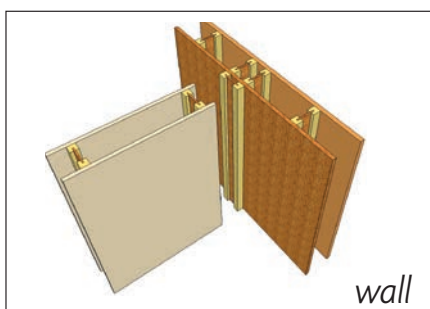
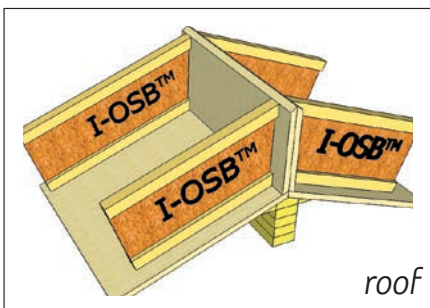
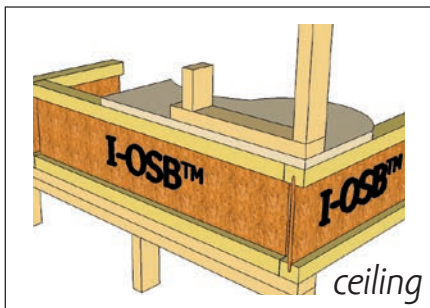
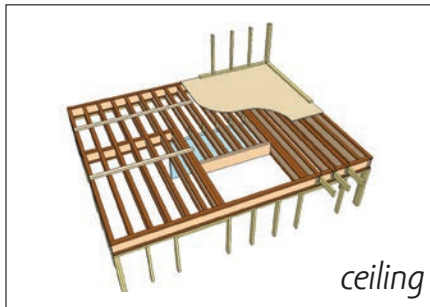
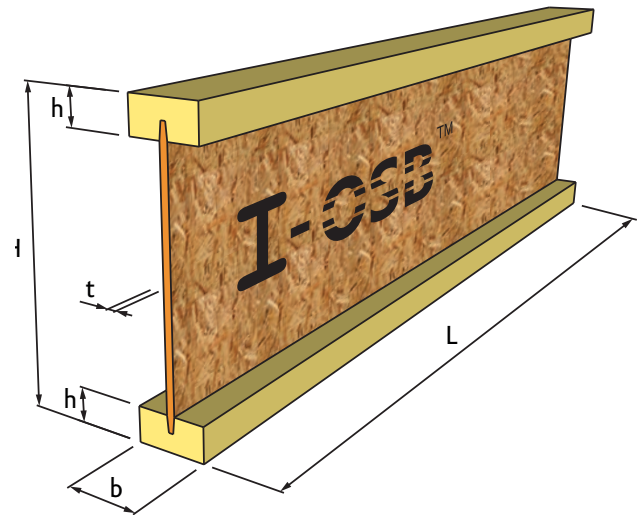


## STANDARD PRODUCTION PROGRAM:

The standard production program I-OSB™ beams are available for immediate delivery depending on the number of the ordered beams and our stock. Our program includes a range of the I-OSB™ beams suitable for construction of roofs, walls, and ceilings. Maximum beam length is 13.0 m. The flanges height 45 mm and web thickness 10 mm are fixed for the standard programme. The standard production offers beam heights from 160 mm to 550 mm.

## CUSTOMIZED PRODUCTION:

The customized production programme offers you an individual approach for higher variability of the beams. You can optimize your I-OSB™ beam in the web thickness selection from 10 mm to 12 mm, flange height from 45 mm to 80 mm, and its width from 58 mm to 160 mm. Maximum production length of the beams is 13.0 m.



### The I-OSB™ beams with web thickness t=10mm:

Order number	Identification of beam	Flanges b x h [mm]	Beam height H [mm]
11005816	I-OSB 10 58/160	58 x 45	160
11005820	I-OSB 10 58/200		200
11005824	I-OSB 10 58/240		240
11005830	I-OSB 10 58/300		300
11005835	I-OSB 10 58/350		350
11005840	I-OSB 10 58/400		400
11005845	I-OSB 10 58/450		450
11005850	I-OSB 10 58/500		500
11005855	I-OSB 10 58/550		550
11008916	I-OSB 10 89/160		89 x 45
11008920	I-OSB 10 89/200	200	
11008924	I-OSB 10 89/240	240	
11008930	I-OSB 10 89/300	300	
11008935	I-OSB 10 89/350	350	
11008940	I-OSB 10 89/400	400	
11008945	I-OSB 10 89/450	450	
11008950	I-OSB 10 89/500	500	
11008955	I-OSB 10 89/550	550	



## I-OSB™ & K-KONTROL® STRUCTURAL SYSTEM

The I-OSB™ beams and individual components of the K-KONTROL® construction system perfectly fit in each other like a puzzle. The basis construction element of the K-KONTROL® construction system is a self-supporting sandwich panel used particularly for construction of walls and roofs. The I-OSB™ wooden beams are used here for the construction of ceilings but they can also be used for joining of individual panels. For the roof structures made from K-KONTROL®

construction system, the beams are also used as integrated chevrons. Both products of CZECH PAN, the I-OSB™ wooden beams and the K-KONTROL® construction system make an integrated building system, that can be used for construction of houses conforming to the most demanding requirements applicable to quality, safety, energy savings and environment.



I-OSB™ as a connecting element of K-KONTROL panels



photo NES, s.r.o.



photo Pasea



photo Pasea



photo NES, s.r.o.



photo NES, s.r.o.



photo NES, s.r.o.

## TECHNICAL SUPPORT

Upon request, the manufacturer provides a technical manual for designing of buildings for design engineers and architects. We provide expert consultations and static solutions prepared by our architects.

