

HODY® 60

COMPOSITE FLOOR DECK

HODY®

profiled steel sheets have a modified trapezium-shaped profile. The profile height is 60 mm. The sheets are intended for the production of so-called "low" steel-concrete composite floors. The height of the finished concrete floor is between 100 and 290 mm. The free span of the supporting structure may be 8 metres or more.

The system

A HODY® steel-concrete composite floor consists of a unique trapezium profiled steel sheet, which functions as permanent formwork and reinforcement, additional reinforcement (as detailed in the following illustration) and a minimum layer of C20/25 quality concrete.



The result is an extremely strong, fire-resistant, sound insulating, relatively thin lightweight composite concrete floor that provides a simple to install cost effective solution.

During the curing period, HODY® sheets constitute the formwork supporting the weight of the concrete and allow the transfer of weight from the assembly load to the supporting structure. After the curing period the HODY® sheets,



usually with an additional layer of mesh reinforcement within the concrete produce an integral, robust composite floor.

Floor construction systems

- HODY® on steel beams
- HODY® between steel beams
- Unsupported span
- Sound-insulating floor structure
- IFD floor structure
- Wood-concrete composite floors
- Permanently visible constructions*

*HODY® sheeting can be provided at the bottom with a polyester or PVDF coating in RAL colour. Colour options depend on availability.

Features

- Minimum thickness of finished concrete floor 100 mm
- Relatively low own weight ($> 2.10 \text{ kN/m}^2$)
- Span from 2 to 8 m.
- High permissible load P_{rep}
- High bearing capacity in case of point load F_{rep}
- 1010 mm cover width
- Unpropped spans up to 3440 mm
- Simple and quick assembly
- Available from stock
- Low transportation costs compared to prefabricated concrete
- Simple logistics at the site

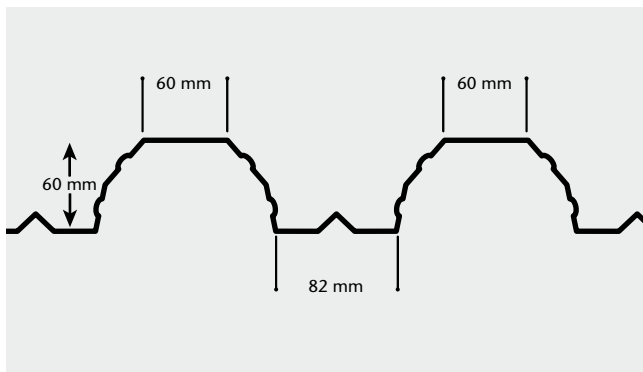


Applications

- New build structures
- Renovation
- IFD Projects
- Ground and higher level floors
- Raised floors
- Mezzanine floors
- Walkways
- Cantilever floors and balconies
- Composite steel-concrete floors
- Composite wood-concrete floors
- Unit building
- Bridges and overpasses
- Permanent formwork

Technical Details

A detailed technical manual is available providing extensive instructions for the installation of HODY® sheets and the fitting of accessories, such as the profiled infill section in PE or rockwool, galvanised steel edges and/or end profiles, HODY® mesh reinforcements for increased fire-resistance, upper reinforcement or contraction netting, concrete thickness and quality to be applied.



The HODY®60 trapezium profile has a modified geometry, which allows for optimal pouring load and makes sure the cooperation between the HODY® profiled steel sheeting and the concrete allows for the highest possible load bearing capacity of the concrete floor.



Reports

HODY® low steel-concrete composite floors are extensively tested by TNO-Building and Construction Research in Delft, Netherlands.

Further calculations, design principles and tables were elaborated by the Dutch Ingenieursburo Bartels b.v. Everything was based on Eurocode 4.

Calculations

If required we can make the calculations and, if applicable, draw the plans which need to be approved by the competent authorities before the works can be started.

Service and advice

Should you have any questions please contact your supplier or our technical advisors. They will be able to advise you on the applicability and applications of HODY® steel-concrete composite floors.

Specifications service

Specification clauses of the HODY® composite metal floor decking are available in the NBS Plus.

Technical data HODY®60 sheets

Nominal width	:	1086 mm
Cover	:	1010 mm
Trade lengths	:	5000, 7400 and 11000 mm
Dimensional	:	continuously variable up to 12000 mm*
Length range	:	-5/+ 20 mm
Width tolerance	:	-6/+ 6 mm
Nominal steel thickness	:	0,75 mm**
Design thickness	:	0,71 mm
Profile height	:	60 mm
Profile width	:	60/82 mm
Weight	:	0,0874 kN/m ²

* Lengths > 12 metres available on request.

** Steel thicknesses 0.88 and 1.00 mm also available, if required.

Minimum concrete floor thickness 100 mm, depending on the load calculation. C20/25 concrete quality.

Steel quality: S320 GD + Z275 N-A-C in accordance with NEN-EN 10147
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P.O. Box 102 • 3300 AC
Dordrecht • The Netherlands
Pieter Zeemanweg 107
Industrial Est. Dordrecht West
Tel. : 0031 78 617 44 00
Fax. : 0031 78 617 10 06
E-mail : repppel@repppel.nl
Internet : www.repppel.nl