Cast-In Channel



Product Overview

IG Masonry Support's stainless steel Cast-in Channels are rolled anchor channels with swaged studs. Supplied in 3050mm lengths the channels are used for fixing IG Masonry Support Systems to concrete structures. M12 T-head bolts and lock nuts allow secure and easy connection of the masonry support system on to anchor channels.

A continuous anchor channel embedded into the concrete wall provides high adjustability and enables quick and easy installation of masonry support brackets.

Enhanced Features

- Designed in accordance with CEN/TS 1992-4-3
- Facilitate users working with low edge distances
- Load resistances can be improved by using higher concrete strength class on loading
- Shear and tensile resistance in concrete can be improved with additional reinforcement







Masonry Support

IG

Key Benefits

Installation Benefits

The Cast-in Channel solution for fixing masonry support systems to reinforced concrete has the following installation benefits:

- No requirement for onsite drilling
- Quick and easy installation of masonry support systems
- Fixing of masonry support without potential damage to concrete, due to drilling
- High load capacity
- Removes the risk of striking reinforcement
- Reduced installation time for masonry support systems

Health and Safety Benefits

The health and safety benefits fulfilled by the use of Cast-in Channel as solution for fixing masonry support systems to reinforced concrete over alternative fixing solutions include:

- Installation without the use of electrical tools
- Reduced erection times / working at heights
- No dust from onsite drilling



Product Design and Testing

The anchor channel has been independently tested by Third Party Organisations and Technical Approval Bodies to evaluate and validate the physical performance and long term durability of all components as well as ensure the products are fit for purpose and conform to regulations.

ETA Certified

The anchor channels have been tested in IFBT Leipzig in accordance to the EOTA guidelines and have been awarded an ETA certificate from DIBT (German Institute of Building Technology).

The ETA approval includes thorough specifications on internal and third party quality control of on-going production. Therefore quality assurance is in place to be certain that the quality of the channels correspond with the samples tested during the approval procedure.



The European Technical Approval ETA - 13/0399 for the HMPR-CE Anchor Channels was issued by the Deutsches Institut für Bautechnik (DIBt) in 2019.

This new approval is valid on all states of Europe. An ETA catalog is available which includes the dimensioning of the anchor channels in accordance with the new European standards series CEN/TS 1992-4-3 "Design of fastenings for use in concrete -Anchor Channels."

Eurocodes

The channels are Eurocode compatible and are designed and dimensioned according to CEN/TS 1992-4 standard in combination with the approved loadings in the ETA approval.

ISO 9001:2008

Quality production with strict control according to European requirements. Management and service quality is certified by ISO 9001:2008.



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Product Range

The Cast-in Channels are available in a range of sizes that will support line loads up to 27kN/m (unfactored). This will cover most masonry support applications. Supplied in 3050mm lengths the channels are made from stainless steel (A2) 1.4301 & 1.4401.





Cast-In Channel minimum edge distances & thickness

Depending on the channel type, anchor studs must be positioned at a minimum distance from the component edges.

The minimum spacing of T-head bolts according to the table below must be adhered to.



Cast-In Channel		38/17-167	40/25	49/30
Min. Spacing of Bolts (mm)	S _s , min	150mm	150mm	150mm
Min. Anchor Depth (mm)	min h _{ef}	102mm	79mm	94mm
Min. Edge Distance (mm)	C _{min}	50mm	50mm	75mm
Min. Slab Thickness (mm)	Slab _{min}	100mm*	100mm*	150mm*
Min. Stud Distance (mm)		167mm	250mm	250mm

* Reduced Loading



Installation



Cast-in Channels are fixed to formwork after careful planning and positioning. Concrete is then cast into the formwork.



Masonry support is fitted to the cast-in channels with T-head bolts and lock nuts. T-head bolts are inserted into the channels horizontally and then turned right through 90 degrees. This locks them vertically in the channel.



After the concrete is cured, remove protective foam filler inside the channel.



Align fixings to masonry support bracket centres, and torque to correct setting for fixing type. **See information below**.

HTB T-Head Bolts Installation

All Cast-in Channels are designed and supplied with M12 Stainless Steel T-Head Bolts.

- T-head bolts are installed with the elongated head aligned with the channel, allowing the bolts to be inserted into the channel opening.
- The T-head bolts are then rotated by 90 degrees so that the elongated heads are locked in place.
- The IG Masonry Support System can then be installed onto the bolts in the normal manner.
- The bolts are then torqued in accordance with the below table.

Cast-in Channel	T-Head Bolt Diameter (mm)	Setting Torque (Nm)
38/17-167	M12	25
40/25	M12	25
49/30*	M12	60

* 49/30 Cast-in Channel is only specified in extremely high loading situation.





Cast-In Channel

Installation Training

IG Masonry Support provides onsite installation training and offers onsite support from its experienced team of structural and civil engineers.



Specifying & Ordering

Design Service & Support

IG Masonry Support's designers and engineers provide a full design service for the Cast-in Channel system, tailored to the requirements of each project.



For Cast-In Channel Design and Sales Enquiries Contact

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