

## Material properties

- Steel E24, thickness 1.5mm
- Coating, electroplating 7 to 15  $\mu\text{m}$
- TRH-CLIP element with threaded hole diameters for M6-M8 (Eurocode 011430)

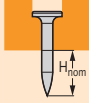

## Tools

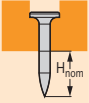

Pulsa 700E

## Nail types recommended

- HC6-15, HC6-17, HC6-22 in concrete C50/60 and prestressed concrete
- C6-20, C6-25 in concrete C30/37 maximum

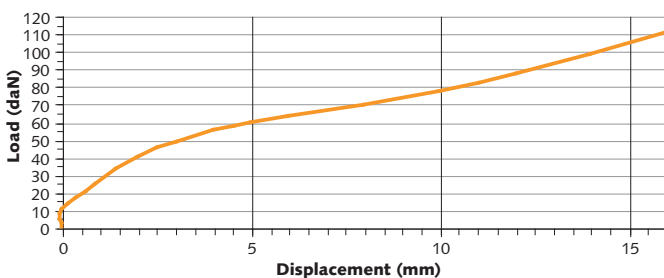
## Recommended loads

HC6-15			Characteristic resistance	Recommended load	TRH-CLIP displacement at the recommended load
			$N_{Rk}$ (kN)	$N_{Rec}$ (kN)	$d(N_{Rec})$ (mm)
	$f_{uk} = 410 - 450 \text{ N/mm}^2$	$H_{nom} = 6.5\text{mm}$	5.0	1.5	9.5
	$f_{uk} = 500 - 550 \text{ N/mm}^2$				

HC6 range			Characteristic resistance	Recommended load	TRH-CLIP displacement at the recommended load
			$N_{Rk}$ (kN)	$N_{Rec}$ (kN)	$d(N_{Rec})$ (mm)
	C20/25	$H_{nom} = 15\text{mm}$	0.87	0.1	1.0
		$H_{nom} = 20\text{mm}$	1.41	0.1	1.0
	C40/50	$H_{nom} = 10\text{mm}$	0.34	0.1	1.0
		$H_{nom} = 15\text{mm}$	0.87	0.1	1.0
Prefabricated Prestressed		$H_{nom} = 10-12\text{mm}$	0.34	0.1	1.0

## STATIC LOAD ONLY

## TRH-CLIP deformation



## Fire test

Test report. nb 05-158/A (CSTB)



TRH-Clip + HC6-17 pin	Characteristic resistance under fire exposure		
	$N_{Rk,fi}$ (kN) 30 mn	$N_{Rk,fi}$ (kN) 60 mn	$N_{Rk,fi}$ (kN) 90 mn
C20/25 $H_{nom} = 15\text{mm}$	0.25	0.13	0.02

$N_{Rd,fi}(t) = N_{Rk,fi} / \gamma_{M,fi}$  usually the safety factor under fire exposure  $\gamma_{M,fi} = 1$ .