

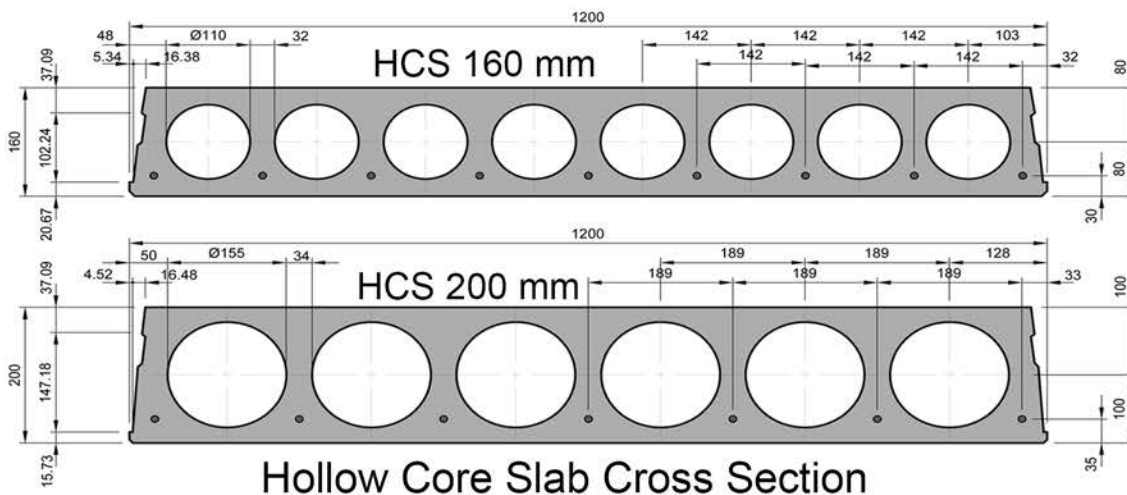


## Hollow Core Slabs

- Precast, prestressed with longitudinal cores.
- Eliminate the need for slab formworks and reduce material and labor costs.
- Lightweight but capable of longer spans.

Ideal for projects that require wide open spaces like:

- Parking garages
- Malls
- Building sections like lobbies.



Hollow Core Slab Cross Section

### TECHNICAL DATA :

#### CROSS SECTIONAL PROPERTIES

	HC160	HC200
Width, mm	1,200	1,200
Thickness, mm	160	200
Cross sec. net area, mm <sup>2</sup>	111,925	121,998
Distance of top fiber to neutral axis, mm	80	100
Distance of bottom fiber to neutral axis, mm	79	99
Moment of inertia, mm <sup>4</sup>	328 x 10 <sup>6</sup>	568 x 10 <sup>6</sup>
Self weight w/o topping kg/m <sup>2</sup>	224	244

#### CONCRETE PROPERTIES

Concrete density, kg/m <sup>3</sup>	2,400
Strength @ 28 days, f'c, MPa	41
Strength @ release, f'ci, MPa	27
Modulus of elasticity @ service, Ec, MPa	30 x 10 <sup>3</sup>

#### PRESTRESSING STEEL

	HC160	HC200
Wire	7-wire, high tensile, helical strand	
Ultimate strength, fpu, MPa	1,860	
Yield strength, fpy, MPa	1,630	
Modulus of elasticity, Ep, MPa	195 x 10 <sup>3</sup>	
Nominal diameter, mm	9	12

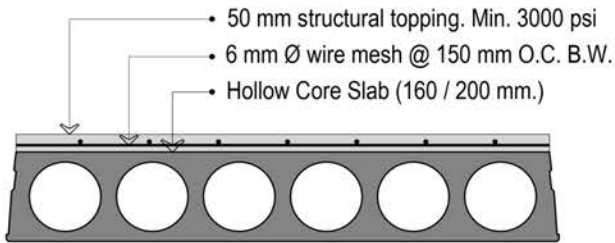
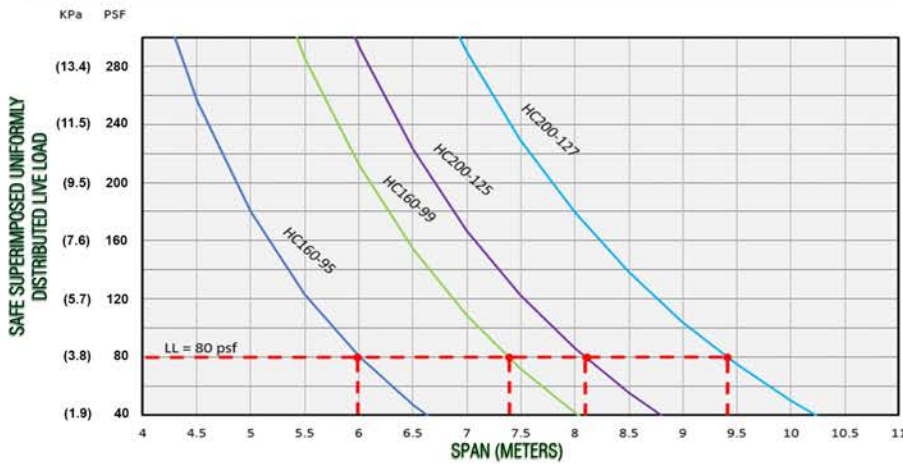
#### CONCRETE TOPPING

Structural topping with min. strength @ 28 days, f'c, MPa	21
Minimum thickness, mm	30

# CAPACITY CURVE



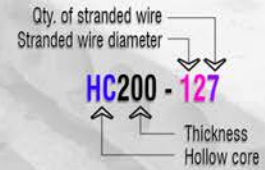
## CAPACITY CURVE OF HC160 & HC200 WITH 50 mm STRUCTURAL TOPPING



Guide in using the hollow core slab capacity curve :

1. Service live load (LL) shall be determined by the user/ designer.
2. Locate the live load in the graph.
3. Select the type of hollow core slab depending on the span needed.

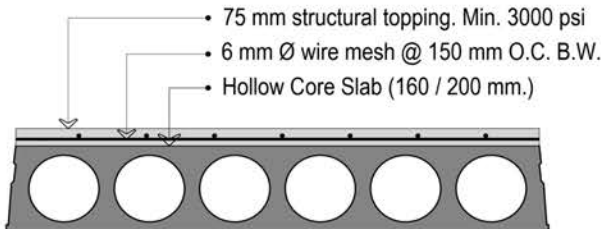
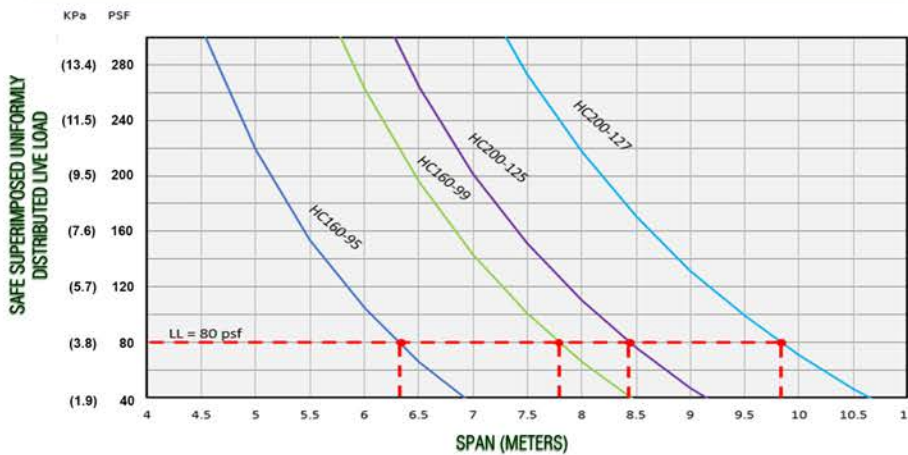
### Legend :



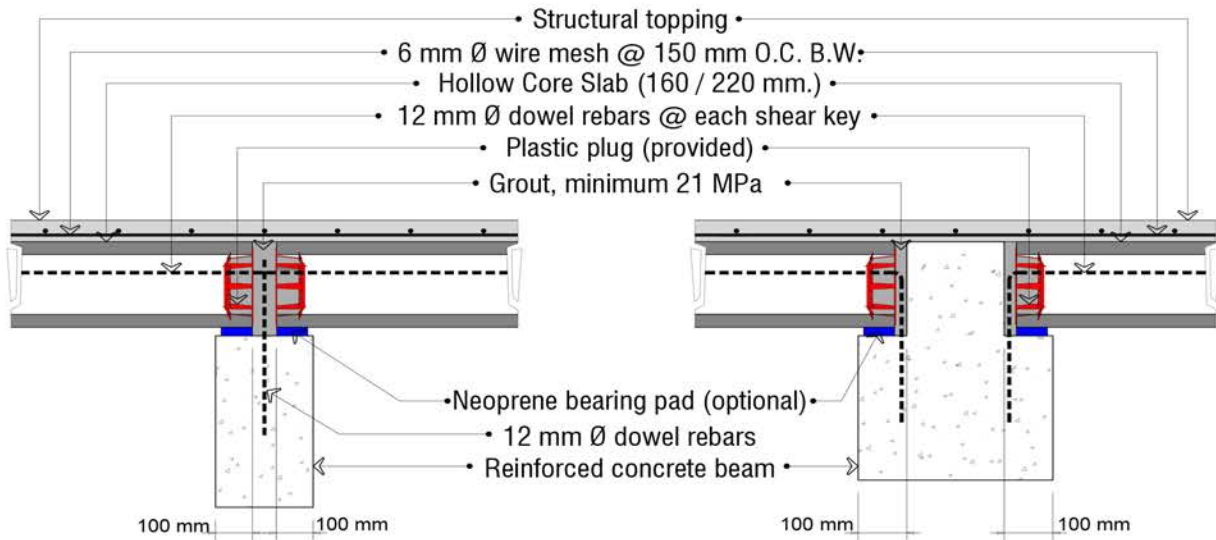
### Note :

For higher loads and/or longer spans, please contact your Jackbilt Precast Specialist.

## CAPACITY CURVE OF HC160 & HC200 WITH 75 mm STRUCTURAL TOPPING

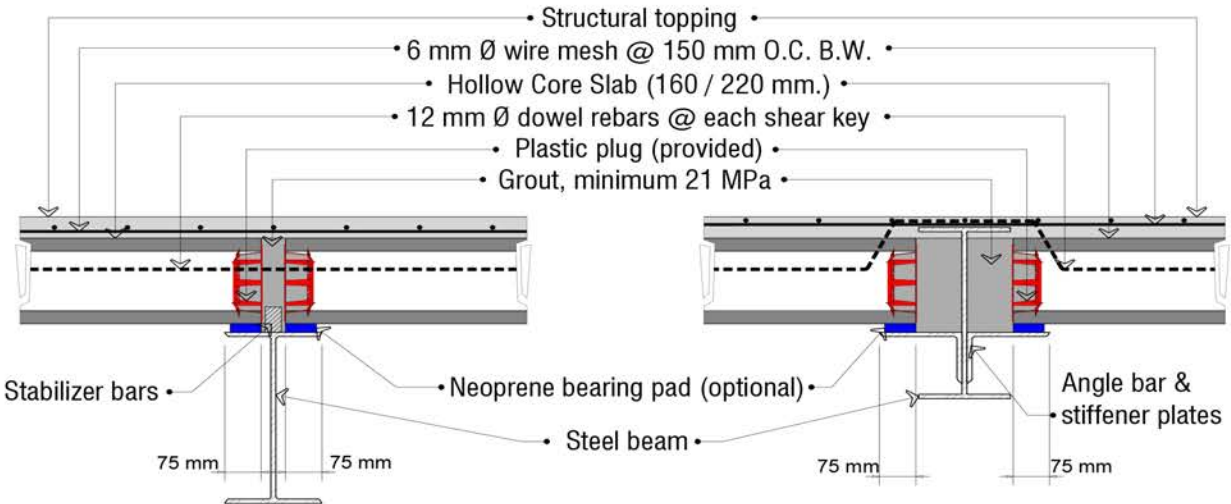


**STRONGER • FASTER • BETTER**



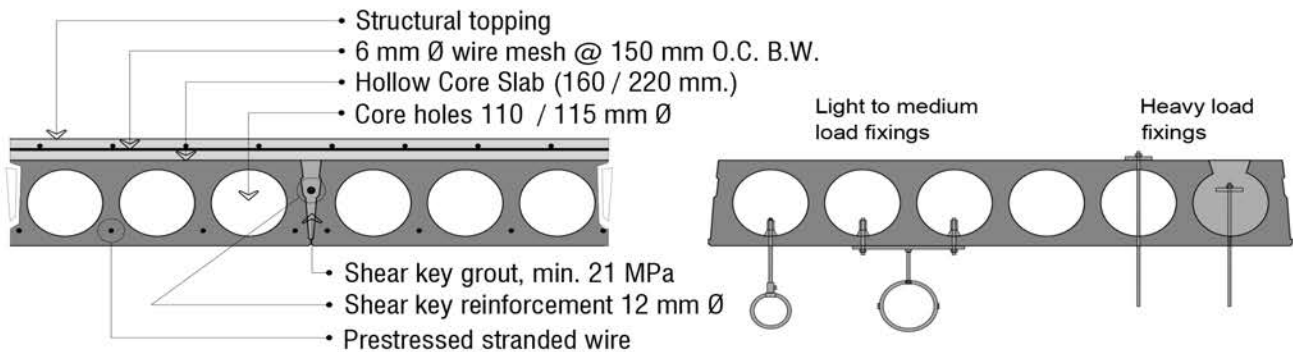
CONNECTION DETAIL ON TOP OF CONCRETE BEAM

CONNECTION DETAIL ON CORBEL TYPE CONCRETE BEAM



CONNECTION DETAIL ON TOP OF STEEL BEAM

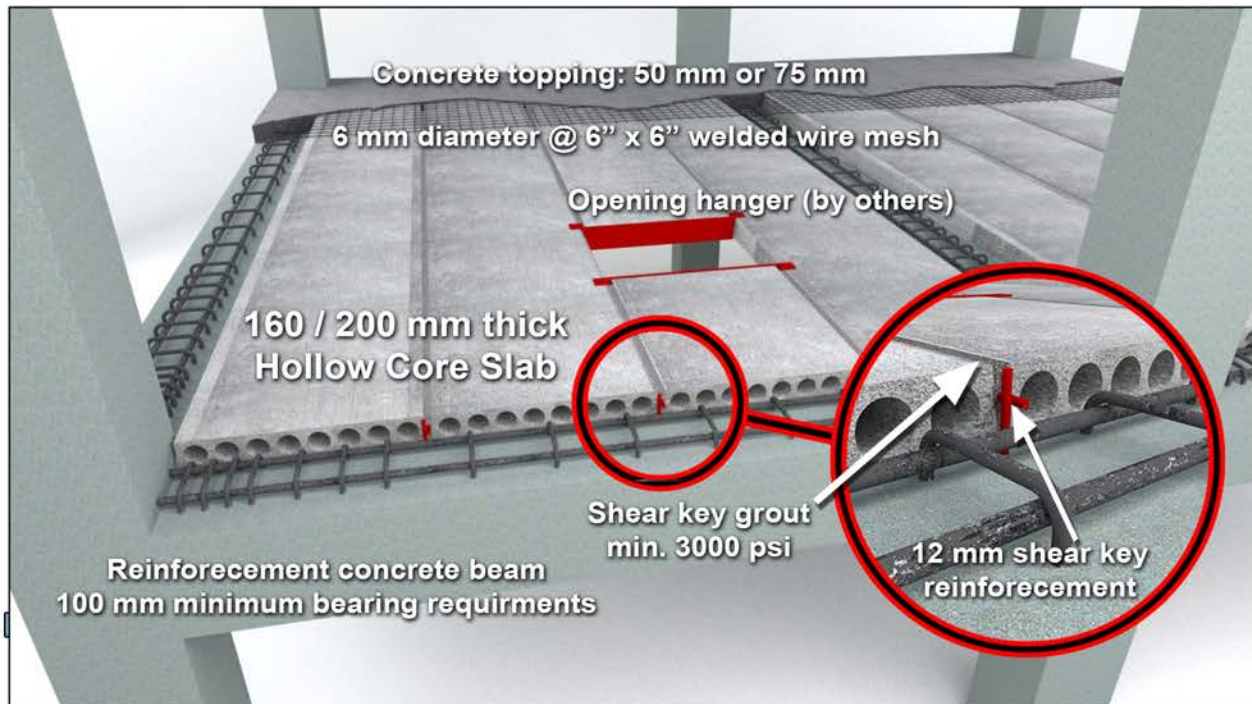
CONNECTION DETAIL INTEGRATED WITH STEEL BEAM



SHEAR KEY CONNECTION DETAIL

LOAD FIXINGS DETAIL

## HOLLOW CORE SLAB TYPICAL INSTALLATION



### HOLLOW CORE SLABS INSTALLATION

- Requires specialized lifting beam and clamps
- Slab should be horizontal when lifting

### SMOOTH SOFFIT

- No need for drop ceiling
- Directly paintable