#### Hollowcore Advantages Typical Insallation Time 1–3 Hours

#### Anatomy of a concrete built structure



## Hollowcore Advantages

Fire Resistance Data

Excellent fire resistance

Through the choice of the different thicknesses of the lower part of the element, floors can be produced with a high fire resistance up to 180 minutes.



Cost efficient construction solution

been produced they can be removed from the casting beds after just 6-8 hours.



Installation with crane

With only 3-4 workers it is possible to install more than 500-600 m2 of floor per day.

Large production volumes with uniform cross sections even with different cable reinforcement configurations. Once the concrete elements have Hollowcore slabs have minimal deformation even with high slenderness ratios due to the transversal



Large spans

load distribution and even when the elements do not have any concrete topping.

The produced elements have high load resistances thanks to a low water/cement ratio of concrete from 0.25 to 0.35. Higher water/cement ratios cannot be employed for the production of desired cross sections without the use of expensive formworks.

# Hollowcore Advantages



Uniform crossection

The presence of longitudinal voids in the crosssection leads to approx. 50% saving in concrete compared with a plain cast in-situ reinforced slab, and at the same time cuts the amount of prestressing steel by 30% because of the lower self-weight. Assured quality

Production of Hollowcore

By using specific equipment for the manufacture of the concrete elements and a high end quality control system.



Ceiling slabs

The lower surface of the element is smooth having a steel formwork finish. Generally this surface can be left as seen or can be simply painted.



Large Spans

Hollowcore slabs have a wide range of applications. They can be produced up to 25 m long. They are very common in the residential, healthcare, education, industrial and commercial markets and also in seismic zones. It is possible to manufacture elements with end openings that are then filled on-site in an orthogonal direction to the floor creating solid ends to increase shear resistance.

### Hollowcore Advantages

**16.**Easily adapted to enable mounting on ancillary building system.



Car park soffit view

Hollowcore slabs are ideal for the mounting of ancillary plant such as electrical trays, water sprinkler and HVAC systems.



Strands pattern

Prestressing technology ensure the long lasting and exceptional loading. Multiple metal wires (strands) prestressed and casted in our slabs giving them extreme strength and very long design life.



Slab installation

Applicable to all loads and spans meaning that there is no need for supports during installation. It is possible to load the floor immediately after installation, even without any in-situ concrete casting.



Production of Hollowcore

Hollowcore slabs are economic with their use of materials. One reason is that the precaster normally uses fairly high concrete and steel grades, consequently the products use less materials to achieve the same load bearing capacity as cast in-situ structures. The presence of longitudinal voids in the crossection leads to about 45% saving in concrete compared with a plain in-situ cast reinforced slab and at the same time cuts the amount of prestressing steel by 30% because of its lower intrinsic weight.