Hollowcore Advantages
Typical Installation Time 1–3 Hours

Anatomy of a concrete built structure

1. Easy project implementation giving designers greater versatility

2. Our slabs require a minimum 90mm bearing on block work or 75mm on steel structure

3. Fogarty floors are ideal for insulation and underfloor heating system

4. Cantilever slabs have design advantage e.g. balconies

5. HC voids act as insulator for sound and heat, as it reduces transmission from one floor level to another

6. Greater spans and load ratio may be achieved by applying structural screed over entire slabbing area

7. Continuous voids in Hollowcore can accommodate electric or mechanical services

8. Excellent fire resistance due to voids running continuously through floor slabs
Hollowcore Advantages

Excellent fire resistance

Cost efficient construction solution

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

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.

Hollowcore slabs have minimal deformation even with high slenderness ratios due to the transversal load distribution and even when the elements do not have any concrete topping.

Large spans

Heavy weight capacity

Installation with crane

Fire Resistance Data

Stock of slabs

Large production volumes with uniform cross sections even with different cable reinforcement configurations. Once the concrete elements have been produced they can be removed from the casting beds after just 6-8 hours.

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

**Lower self-weight**

The presence of longitudinal voids in the cross-section 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**

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

**Excellent lower surface finish ready to paint**

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.

**Easy project implementation giving designers greater versatility**

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.

**Uniform crosssection**

**Production of Hollowcore**

**Ceiling slabs**

**Large Spans**
Hollowcore Advantages

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

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

17. High durability and load resistance.

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.

18. Long spans without temporary supports.

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.

19. Green product reduced use of raw material.

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 crosssection 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.