

# Span Notes



No. 2

## Planning For Openings in Spancrete®

Openings are required through virtually all floors and roofs to provide for HVAC, plumbing, and electrical services. Openings can affect both the design and cost of a structural system, whether it's cast-in-place concrete, steel, or Spancrete.

Openings through Spancrete affect plank layout, plank thickness, prestressed reinforcing, cost, and project schedule. It is important to carefully plan for them in the early stages of project design. Your Spancrete manufacturer is available to provide valuable assistance in laying out openings.

The following basic information affects openings, and is needed to properly design and develop accurate cost estimates:

1. Spans and all superimposed loads
2. Fire rating requirements
3. Size, location, and orientation of all openings
4. Flexibility of opening locations
5. Whether or not composite concrete topping will be used over the Spancrete plank

The areas of responsibility for locating and providing openings are as follows:

- The Architect/Engineer generally shows all openings to be provided by the Spancrete manufacturer on the structural and/or architectural contract drawings.
- The General Contractor is responsible for transmitting Spancrete shop drawings to the various subcontractors to obtain the size, shape, and location of all required openings. This information is essential so that the Spancrete manufacturer's engineering department can determine if any changes are necessary in plank layout, thickness, or strand pattern. To prevent unnecessary delays in the manufacturing, the importance of early coordination by the General Contractor cannot be overemphasized.



- The General Contractor also is responsible for proper location of all openings in the field. Field-cut openings should be cut neatly and accurately by experienced workmen using proper equipment.
- Plumbers and electricians easily drill their own small openings in the field after the plank has been erected, grouted, and if necessary, topped.
- The Spancrete manufacturer will provide large openings for HVAC, mechanical, and other equipment, in accordance with the contract documents.



These are either cut in the field after erection or at the plant prior to shipment, depending on the individual manufacturer's policy. When necessary, these openings should be framed with steel headers by the Spancrete manufacturer.

- Openings not shown on the approved shop drawings may not be cut without written permission of the Spancrete manufacturer.



The Spancrete Manufacturers' Association has completed extensive engineering and testing to develop information on openings. Consult your local Spancrete manufacturer for design assistance to ensure a successful Spancrete project.