Many designers are uncertain about how the structure they're planning to design and build should be framed. And they have questions such as which material is the best, most efficient and most economical—wood, concrete block, masonry or steel?

Designers and builders are sometimes as confused as consumers who shop in a supermarket, by the various product claims and counter-claims of manufacturers. A hard look at the facts with the help of a wall and ceiling contractor is one way to find the answer to the dilemma of choosing the proper method, or material for framing low-rise buildings.

Since the use of steel building components is a comparatively new approach to construction in residential and light commercial applications, contractors can gain a jump in the job itself by helping customers to examine the reasons that have made steel framing systems for floor, wall and roof applications so appealing to builders, designers and architects.

Speed-Economy

The most significant factor is construction speed and the resultant economies derived.

The components of a steel framing system—joists and studs and channel tracks—are delivered pre-cut to size on the job site and are assembled into complete wall sections with all required accessories such as bridging, diagonal wind bracing and include door and window openings properly framed out. This prefabrication can be done at the job site if there is sufficient space, or at the contractor's shop. The components are joined by welding or with screws and regardless of where the fabrication takes place, the process is completed in a controlled assembly line operation with maximum speed and efficiency.

This phase of the construction can begin long before the site is ready for erection. Crews and weather cannot be a deterrent since the fabrication is done in an enclosed area. The time savings accrued are significant.

Completely assembled sections may be stored and moved into place once the foundations and ground slabs are completed. Erecting the units is a fast and easy process. Very often they are so lightweight, workers can easily lift assembled wall sections into place.

Larger and heavier assemblies are erected by appropriate hoisting equipment. Exterior facing can be attached to the fabrication wall section before erection begins.

(Continued on Page 30)
OFFICE DESIGN:
(Continued from Page 29)
does, does it need to be the same kind of desk used by his secretary?

DeHaan has found that executive offices have become much more personalized in decor. “Interested people usually prefer to work in an interesting setting, whereas a bland and unexciting setting implies the occupant is a conventional ‘organization man’ with little personality.”

Shaping the office “landscape” depends on the construction of the buildings, as well as energy conservation, according to the designers. Swimmer, agreeing with DeHaan, has found that “today’s executive offices are still being designed with a ‘home-oriented’ environment, but the general office is often divided with five-foot panels, which provide a measure of privacy, but still permit carpeting to be used throughout and the same lighting systems above.”

STEEL FRAME:
(Continued from Page 16)

As the panels are installed, both framing and enclosure are accomplished in one operation. Just about any surfacing material may be used in a steel framed building from plaster to stone and brick to metal and plywood.

Enclosure Is Fast

Once the structural frame is positioned and attached, the structure is enclosed rapidly and interior work proceeds immediately. Work schedules are more efficient and simplified.

For example, skilled craftsmen can be scheduled to perform their functions at a designated time rather than wait for the completion of preparatory work. Plumbers and electricians can complete their jobs faster since steel studs and joists have prepunched openings for wiring and accessories.

The speed and efficiency of the overall construction with steel framing often results in a building’s completion sooner than anticipated. Consequently, significant savings in interim financing accrue since the interest paid on a construction loan is reduced. Rental income is also generated sooner in the case of apartment construction.

Code Approval, Too

The fact that steel is an incombustible material may provide lower fire insurance premiums. An architect can easily meet just about any fire rating requirement through the selection of proper collateral materials.

Approval has been received by International Congress of Building Officials (ICB); Building Officials and Code Administrators (BOCA); Southern Building Code Congress (SBCC); as well as satisfying F. H. A. requirements.

Lightweight steel framing systems offer the versatility and flexibility to meet the specifications of just about any type of project from low rise apartment construction, schools, office building and nursing homes to shopping center complexes.

Although the systems can easily be adapted to any building plan, it is recommended that the decision be made during the initial planning stages. Revisions are easily transacted when steel framing is successfully bid against alternative construction methods.

Although the desired effects are often achieved at costs substantially below other methods of construction, the economies are due to efficiencies in design and installation methods, not to cutting corners. The uniformity of the steel framing member, which does not warp, crack, or swell, helps reduce call backs.

When a contractor’s customer understands the various materials and methods of framing used in residential and light construction, he will discover that steel framed buildings are recognized as structurally reliable, top quality construction.