



Precast hollow core slabs and masonry walls make sense for low rise multifamily buildings

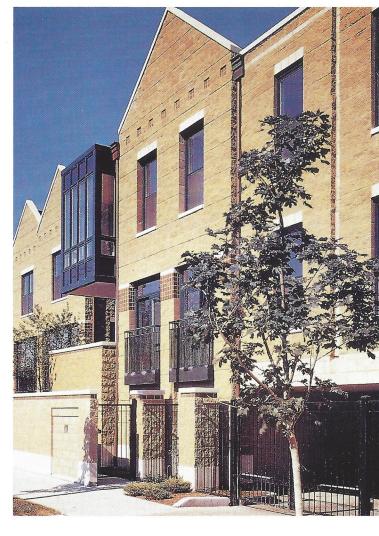
Across the nation multifamily residential buildings are a popular form of housing. Apartments, condominiums, townhouses, hotels, motels and senior citizen complexes are commonly built as lowrise structures. While many are being constructed with combustible materials some municipalities and occupants are insisting on noncombustible construction of precast hollow core slabs and masonry walls.



Build it safe

If it's built with the wrong material, an entire multifamily building may be burned to the ground by a kitchen fire or a careless smoker. Controlling the spread of fire is a key to minimizing casualties and property losses. The right material, noncombustible masonry and precast slab can stop fire cold, preventing a small fire in one unit from gutting an entire complex.

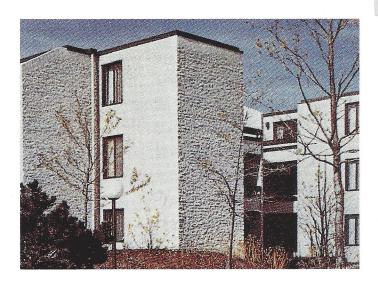
Building fires venting from doors and windows can climb combustible outside walls and enter the same building at another level. Fire that penetrates through the ceiling to the attic area can spread horizontally very quickly with combustible construction. Combustible construction accelerates this type of fire spread. Precast slabs and masonry walls do not promote the spread of fire, do not burn or produce smoke or toxic fumes.



A matter of dollars and sense

Purely from a cost point-ofview, it makes good sense to choose precast slab and masonry wall construction. As with other businesses, "you get what you pay for", in the building industry. Investing in this type construction brings numerous long-term benefits including: lower operating costs (insurance, maintenance and energy) faster sales and resales, occupant and investor appeal, community acceptance, higher appreciation, proven performance and firesafety.

Choosing precast slab and masonry wall construction is an investment in the quality and firesafety of the building. These attributes are becoming more important in today's sophisticated marketplace. Consumers are seeking out this type of multifamily housing. Consumers perceive the quality and firesafety of these buildings as well as the superior sound qualities, security and personal pride of being and owner/occupant.



Balanced design

Balanced design is a comprehensive three tiered approach to over all firesafety—containment, detection and suppression. In addition to these physical components, a strong fire prevention education program is an integral part of a good fire protection plan.

Including automatic sprinkler systems in residential buildings is a wise decision. However, automatic sprinkler systems should compliment noncombustible construction and not be installed as in place of. Both detection and suppression systems do fail, as they rely on human frailties, require proper maintenance, electrical supply and a dependable water supply. Noncombustible precast slab and masonry remains in place when other safety systems fail.

Detection systems, suppression systems and noncombustible containment systems each provide a valuable safety factor. Combine these systems into a total system and you have the best possible fire protection for low-rise multifamily buildings.







Balanced design for lifesafety of property protection

Balanced design:

Balanced design is a comprehensive three tiered approach to fire safety—detection, suppression, containment. In addition to these physical components, a strong fire prevention education program is an integral part of a good fire protection plan.

Containment:

Noncombustible construction of precast hollow core slabs and masonry walls for unit separation contains the fire; does not burn, smoke, or give off fumes; does not contribute to fire; serves passively for life of the building; Stops Fire Cold.

Detection:

Early warning devices alert occupants to the dangers of a pending fire, smoke, fumes; and provides the opportunity to evacuate the building safely.

Suppression:

Sprinklers installed in select areas such as hallways, stairways, storage areas, or other high hazard areas, to control and extinguish fires at an early age and to maintain safe egress from buildings.

Education:

Educate occupants on the hazards and prevention of fire and to establish procedures to follow in exiting a building safely, in case of fire.

Play it safe— Build it safe

A higher degree of firesafety is in the best interest of both occupants and owners. People deserve the best possible protection from the hazard of fire and are beginning to demand it.

Precast hollow core slabs and load bearing masonry walls provide the most fireresistant and economical system available today for low-rise multifamily buildings. The system has a two-hour noncombustible fireresistance rating and is available nationwide. The system provides the greatest protection for life safety and property at the lowest building life cycle cost.

Advantages of "The System" for the Owner/Developer

- Simple design techniques
- Speed of construction
- Faster sales and resales
- Lower operating costs
- Insurance costs lower
- Maintenance costs lower
- Energy costs lower
- Lowest life cycle cost
- Higher appreciation
- Attracts quality concerned occupants
- Appeals to investors
- Proven performance

Multifamily Construction Advisory Committee of Illinois

Community acceptance

Advantages of "The System" for the Occupant:

- Firesafe noncombustible construction
- Does not burn
- Does not produce smoke, fumes or gases
- Does not add fuel to the fire
- Provides two hour separation between units
- Serves passively for life of building
- Needs no testing or inspection while in service
- No bouncy or creaky floors
- Superior acoustic qualities
- Security for occupants and contents

Advantages of "The System" for the Community:

- Lower risk/exposure for the fire service
- Construction does not add fuel to fire
- Fire is contained
- Adjacent units protected
- Structural collapse unlikely
- Provides quality construction
- Community recognized for its firesafe construction
- Property tax base maintained
- Attracts investors, not speculators to the community

