PPCIA A Chapter of Precast/Prestressed Concrete Institute

THE UNSURPASSED BENEFITS OF USING PRECAST CONCRETE FOR MULTI-FAMILY HOUSING

Precast concrete structures offer unsurpassed benefits for designing and building multi-family housing projects by providing high quality products with faster speed of construction and shortening project schedules. High performance precast concrete components produced and erected under PCI-Certified plant-controlled conditions are also very economical especially when designed and constructed as load-bearing elements that can be integrated into architectural precast components as well.

Typical precast concrete components used in multi-use/multi-family projects include double tees, hollow-core plank, beams, columns, solid and insulated wall panels, stairs and podium slabs. Precast, prestressed concrete hollow-core plank is often used for floors and roofs on bearing-wall structures. Benefits of



this precast solution include spans up to 40-feet-long, vibration resistance, twohour fire ratings, easy floor penetrations, finished ceilings and floors, reduced floorto-floor heights and open clear spans providing more open interior space than with conventional construction.

In addition to its eye-catching aesthetic value, precast concrete structures can withstand the worst weather conditions on earth such as hurricanes, tornadoes, blizzards, wildfires, earthquakes and flash floods. Clearly, precast concrete structures can be both beautiful, resilient and also designed for a 100-year service life with minimal maintenance and upkeep. High performance precast concrete inherently provides the versatility, efficiency, resiliency, durability and aesthetic benefits unsurpassed by conventional construction of multi-use/multi-family housing projects.

ADVANTAGES AND BENEFITS

- Long service life
- Continuous insulation, air and vapor barrier in one highly efficient enclosure system
- Fire and blast resistance
- Vibration control
- Acoustical control
- Fast speed of construction
- Greater quality control
- Corrosion resistance
- Improved finish consistency with plant-controlled production
- Plant production reduces onsite labor and lowers jobsite safety risks
- Minimizes site and project delays thereby reducing overall project costs

PCI MIDWEST Mike Johnsrud, PhD, PE • Executive Director 612-760-6101 • info@pcimidwest.org • www.pcimidwest.org