

A high-angle photograph of a construction site. Several workers in hard hats and safety gear are working on a corrugated steel floor deck. A grid of green rebar is laid out across the steel. A large concrete pump hose is being used to pour concrete into a trench. The workers are pulling yellow ropes. The scene is active and shows the process of creating a composite floor system.

Versa-Floor™

LONG-SPAN COMPOSITE FLOOR SYSTEMS



NEW MILLENNIUM
BUILDING SYSTEMS
Building a better steel experience.

SYSTEMS ENGINEERED FOR A WIDE RANGE OF APPLICATIONS



Multi-story Residential

Managing floor height, fire and sound control, Versa-Floor™ is a shallow-plate composite-floor solution for mid- and high-rise residences. It integrates with any beam and column or bearing wall frame. Engineered floor-openings, sleeves, hanging devices and deck chase-way spaces streamline MEP installations.



Commercial

Cost effective and performance optimized for office, retail and academic spaces, Versa-Floor™ creates large bays designed for high-load combinations that can be structurally reinforced when heavy equipment or floor openings are added after occupancy. Architecturally exposed deck options eliminate suspended or furred ceilings.



Retrofit

Versa-Floor™ systems are ideal for the renovation of existing buildings. Lightweight deck components allow for maximum maneuverability without resorting to heavy lifting equipment. Lightweight concrete topping option reduces loads to existing supports and foundations.



Healthcare

Designed to meet the specific needs of healthcare facilities, Versa-Floor™ provides high-load capacity and assures full flexibility in anticipation of occupancy changes over the service life of the building. Can be structurally reinforced to control floor vibration and support specialized medical equipment. Shallow depth helps match elevations of additions to existing facilities.



Parking Garages

Co-developed with composite frame system partner Diversakore® for parking garage applications, Versa-Floor™ provides a steel-based solution that's fire rated without protective coverings. Minimal 36-in. deep beams can span up to 62 ft., supporting platforms that cover 3-car stall widths (27 ft.).



Specialty Platform

Perfect for podiums, industrial mezzanines, and arena concourses, Versa-Floor™ systems can be designed to transfer high uniform-load combinations and concentrated wall and post loads.



High-Rise

Versa-Floor™ optimizes the design and construction of mid- and high-rise hotels and residences with Panelized Delivery Methods. Co-developed with W&W Steel, the panels combine steel beams and long-span deck into full grid panels measuring up to 1,200 sq. ft. The panels, safely assembled at grade, form multi-story plenum spaces to pass MEP risers after placement. Spandrel beams integrated within the slab eliminate bulkheads adjacent to glass curtain-walls.



OPTIMIZED MULTI-STORY CONSTRUCTION

Versa-Floor™ is a family of structural systems engineered to address market specific building requirements. Versa-Floor™ blends the speed and versatility of steel with the performance and durability of concrete. It utilizes composite floor technology that can weigh up to 40% less than comparably utilized cast-in-place (CIP) concrete floors.

Versa-Floor™ is low-profile and integrates with any beam (wide flange, low-profile composite steel or concrete beam) or bearing-wall method. Monolithically cast concrete finishes flat so it eliminates grouting and floor leveling activities.

Versa-Floor™ is non-combustible and can be fire endurance rated without protective coverings like gypsum and spray materials. There are two distinct deck profiles to choose from, each with specific features and benefits engineered to meet your application requirements.

Advantages:

- Clear spans up to 36 ft. for open space designs
- Integrates with any beam or wall-bearing frame
- Up to 40% less dead weight than CIP
- Low profile controls story and building height
- Predictable vibration behavior
- Fire endurance ratings up to 4 hours
- Flush spandrel beams for glass-curtain walls
- MEP pass-through methods
- Architecturally exposed finish options
- Factory-applied primer paint options
- Optional acoustical treatments

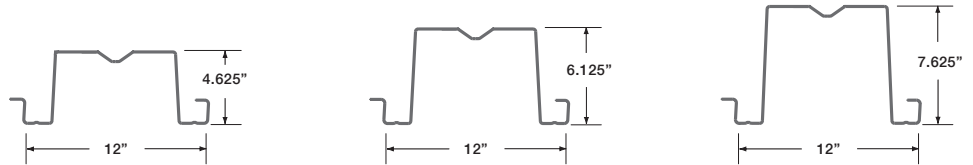
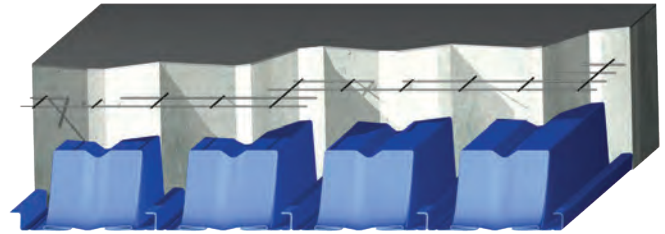
	Versa-Dek® LS Composite	Deep-Dek® Composite	Deep-Dek® Composite Cellular
Depth (in.)	2.0, 3.5	4.5, 6.0 & 7.5 ⁽¹⁾	4.5, 6.0 & 7.5
Ceiling Aesthetic	Lineal Plank	Deep Fluted	Smooth
Concealed Deck Fastening	✓	✓	✓
Factory Primer Option	✓	✓	✓
Concealment of MEP	No	Partial	Full with Access Panels
Hanging Devices	✓	✓	✓
Acoustical Option	✓	No	✓
NRC Rating	Up to 0.85	NA	Up to 1.00
Sustainable	Left exposed, eliminates suspended ceilings and fire-resistive spray or gypsum protection. Preset sleeves and framed openings eliminate core-drilling and sawed cut-outs. Attainable weld-free installations. Re-locatable hanging devices.		

¹ Nominal dimensions. Add 1/8" for manufactured depth.

Versa-Floor™ system featuring Deep-Dek® Composite

The longest spanning composite floor systems available. With span-to-depth ratios equaling those of traditional cast-in-place concrete and hollow-core plank, a Versa-Floor™ Deep-Dek® Composite system helps make steel frame solutions affordable. Patented side-lap connections achieve composite bond.

- Spans up to 36 ft.
- Deep-ribbed steel-deck profile
- Factory-closed ends speed installation
- Safer, cost-effective panelized method
- Unshored pours up to 22-ft. span



FAST. SAFE. COST-EFFECTIVE PANELIZED DELIVERY METHODS.



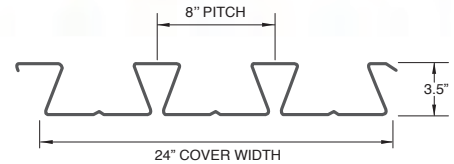
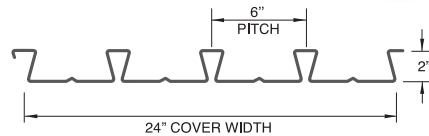
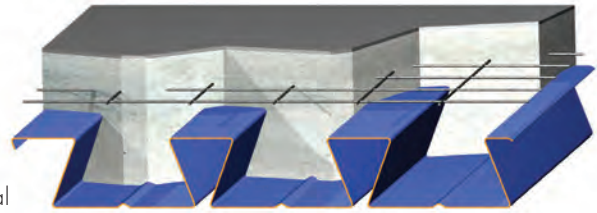
Panelized Delivery Method™ lowers installation costs and improves safety in the field. By shifting high-risk construction processes to the ground, Versa-Floor™ systems make effective use of traditional labor and equipment resources.

For more information visit www.newmill.com

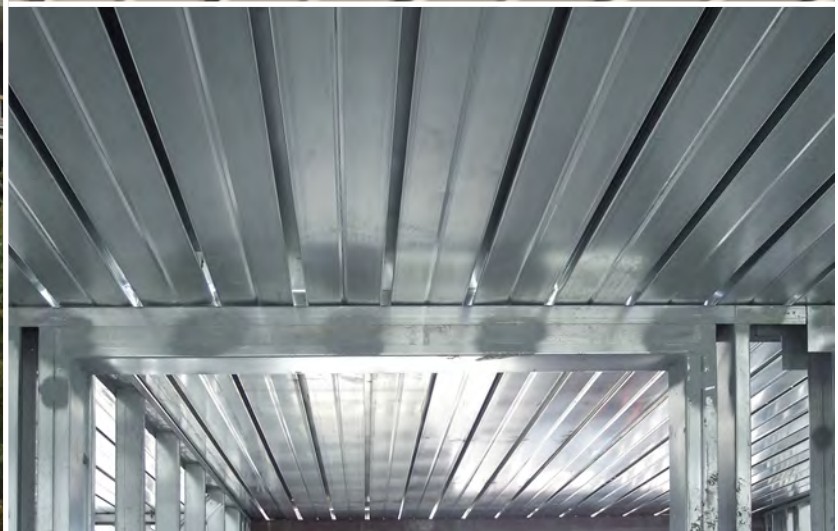
Versa-Floor™ system featuring Versa-Dek® Composite

Long-span composite floor systems with the shallowest unprotected fire ratings available. Offered in 2" and 3.5" depth dovetail profiles. Popular in mid-rise residential structures for reducing story height while maximizing ceiling height. When left exposed, provides a clean linedal plank aesthetic for office, retail and academic spaces. Optional acoustical treatment controls noise reverberation within occupied spaces.

- Lowest total floor depth
- Spans up to 28 ft.
- Dovetail deck profile
- Exposed aesthetic



STRENGTH. AESTHETICS. LOW-PROFILE DOVETAIL DESIGN.



**Your nationwide resource for the broadest range of cost-optimized,
high-performance structural steel joist and deck solutions**

- Structural steel joists, Joist Girders and deck
- Architectural decking solutions
- Versa-Floor™ long-span composite systems
- Custom engineering and design assistance
- BIM-based steel joist and deck design
- Nationwide manufacturing and availability
- Design-build and Improved Project Delivery
- AIA and PDH courses for project optimization



**Email the Versa-Floor™ design team for assistance and technical information:
versafloor@newmill.com**



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