New Millennium Building Systems is your nationwide resource for steel joists, metal decking, and castellated beams.

Butler, Indiana
6115 County Road 42
Butler, IN 46721
Phone: (260) 868-6000
Fax: (260) 868-6001

Hope, Arkansas
3565 Highway 32 North
Hope, AR 71801
Phone: (870) 722-4100
Fax: (870) 722-4245

Salem, Virginia
100 Diuguid's Lane
Post Office Box 3400
Salem, VA 24153
Phone: (540) 389-0211
Fax: (540) 389-0378

Lake City, Florida
1992 NW Bascom Norris Drive
Lake City, FL 32055
Phone: (386) 466-1300
Fax: (386) 466-1301

Juárez, Mexico
Carr. Panamericana 9920
Col. Puente Alto
C.P.32695
Ciudad Juárez
Chihuahua
Mexico
Phone: (915) 298-5050

Fallon, Nevada
8200 Woolery Way
Fallon, NV 89406
Phone: (775) 867-2130

New Millennium Building Systems is a wholly owned subsidiary of Steel Dynamics, Inc.
New Millennium castellated beams are a highly architectural and cost-effective structural option. Longer spans erect faster. Lighter framing reduces column and footing sizes. Web openings allow mechanical, electrical and plumbing to pass through. And the beams can be left exposed for an esthetic look.

- More economical compared to concrete for parking garages, hospitals, office buildings
- Greater strength-to-weight ratio for longer spans
- Lighter framing reduces column and footing sizes
- Castellated beams erect faster
- Web openings easily accommodate MEP runs
- Architecturally appealing when left exposed
- Camber options and galvanizing available
- Can be easily fireproofed
- 100% recycled materials

Greater strength-to-weight ratio
Castellated beams are manufactured by cutting a hot rolled beam lengthwise, using computer controlled plasma arc torches, often in half-circle or half-hexagon patterns. The split halves are then offset and welded back together to form a deeper beam with full circular or hexagonal shaped web openings. The resulting castellated beam is approximately 50% deeper and much stronger than the original hot rolled beam.

Appearance and performance
The depth of a simple, straight castellated beam can be highly customized as to appearance. The strength of a beam can be precisely matched to the load. Castellated beams are readily available with either hexagonal or circular openings. An advantage of the beam is that it supports long, clear spans often desired in office buildings, hospitals and parking garages.

Cambered Beams
Because the castellating process splits the beam into two flexible halves, it is easy to manufacture castellated beams with camber for floor applications. The beams can be assembled with the appropriate camber needed to offset the dead load deflection of the concrete slab.

Composite Floor Hybrid Beams
Another castellated beam design option is to combine a lighter upper half beam with a heavier lower half beam, which are cut from two separately produced beam sections. This works well as a subfloor steel beam supporting a concrete floor, as the studs can be welded to the top flange of the castellated beam to solidly anchor the concrete to the beam.

To discuss the use of castellated beams on your project, please contact our nearest location or visit: www.newmill.com/cast