

COMPOSITE TOTALJOIST®

BAILEY METAL PRODUCTS LIMITED

A SUPERIOR CONCRETE
FLOORING SYSTEM





COMPOSITE TOTALJOIST®

Composite TotalJoist® dramatically increases design and building options, while also delivering a durable, high quality flooring system. Given the quick and easy installation of Composite TotalJoist®, owners and developers can compress their construction schedule to start generating a return on their investment faster.

IDEAL FOR MID-RISE CONSTRUCTION

Composite TotalJoist® is great for all support conditions including block, ICF, cold-formed steel, wood and structural steel.

A SOLID, STABLE FLOOR

With stay-in-place formwork, Composite TotalJoist® combines the benefits of our TotalJoist® system with TotalDeck® and concrete, to create a premium concrete floor system that is stable and feels solid.

TotalJoist® is our patented steel floor joist. TotalDeck® is a dovetail shaped deck with embossed ribs. It forms a very strong, permanent bond with concrete poured onto it, and acts as reinforcement for the slab.



KEY BENEFITS



VIBRATION CONTROL

Every flooring system is reviewed with our proprietary design method to ensure great feeling floors.



HIGH ACOUSTIC RATINGS

Helps minimize the #1 reason for complaints of multi-family living: noise. 60% higher ratings than precast and over 34% higher ratings than wood and gypcrete with reduced sound flanking.



HIGH FIRE RATINGS

Made with non-combustible materials. 2 hr UL/ULC rating with only one layer of drywall.



NO SHORING OR TEMPORARY FORMWORK REQUIRED

Pre-cambered joists eliminate the need for shoring during concrete topping pour. Steel decking as stay-in-place formwork reduces the schedule by eliminating the need to place and tear down formwork.



EASE OF INSTALLATION

Pre-engineered components can be installed quickly and easily without the need for specialized trades.



ACCOMMODATES FLOORING SYSTEMS

Allows for polished concrete and in-floor heating systems. TotalDeck naturally drives heat upward for in-floor applications, increasing efficiency of your heating system.



ELIMINATES BULKHEADS

Removing unsightly and costly bulkheads creates a more modern and spacious feeling interior.



LIGHTWEIGHT AND DURABLE

Made from lightweight steel, our system is 50% less weight than precast with a 100-year+ life expectancy. Offers superior structural integrity in all environments.



PRE-CUT SERVICE HOLES

Large, pre-cut access holes allow trades (mechanical, electrical, plumbing) to run services easily.



NO WIRE MESH REQUIRED WHEN FIBRE MESH USED

Eliminate the labour and safety concerns of welded wire mesh by incorporating macro synthetic fibres into the concrete. No other reinforcing is required.



AVAILABLE IN MULTIPLE DEPTHS

Composite TotalJoist¹ is available in 8" to 18" depth.

APPROVALS

2 hr UL/ULC Rating with one layer of drywall and has received an ICC-ESS evaluation report.

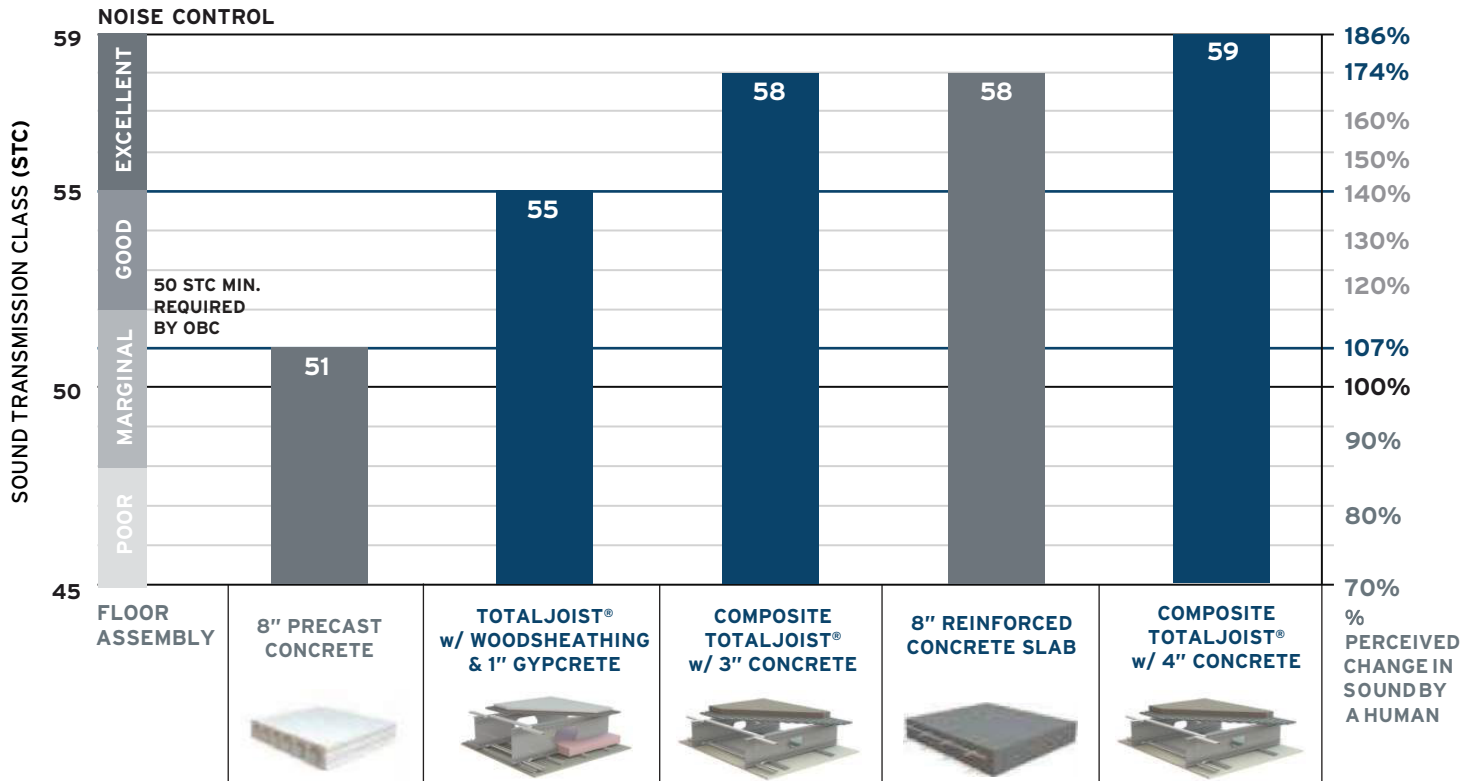


COMPOSITE TOTALJOIST® HAS BEEN USED ON PROJECTS OF ALL SIZES AND COMPLEXITIES BY LEADING DEVELOPERS AND ARCHITECTS.



SUPERIOR ACOUSTIC RATINGS

60% higher ratings than precast and over 34% higher ratings than wood and gypcrete with reduced sound flanking.



UNMATCHED SPANS OFFER DESIGN FLEXIBILITY

Composite TotalJoist® with 3" Concrete Slab, Residential Loading Vibration Controlled

Depth (Inches)	Composite TotalJoist®	OPEN AREAS-NO PARTITIONS					FULL HEIGHT PARTITIONS				
		40psf Live Load / 25psf Superimposed Dead Load					40psf Live Load / 25psf Superimposed Dead Load				
		24" o.c.	30" o.c.	36" o.c.	42" o.c.	48" o.c.	24" o.c.	30" o.c.	36" o.c.	42" o.c.	48" o.c.
8"	8-ic-3	18' 4"	17' 5"	16' 7"	16' 0"	15' 6"	19' 4"	18' 2"	17' 5"	16' 10"	16' 4"
	8-ic-4	19' 2"	18' 4"	17' 6"	16' 10"	16' 4"	20' 4"	19' 2"	18' 4"	17' 8"	17' 1"
10"	10-ic-3	20' 6"	19' 5"	18' 7"	17' 11"	17' 4"	21' 10"	20' 6"	19' 6"	18' 10"	18' 2"
	10-ic-4	21' 7"	20' 5"	19' 7"	18' 10"	18' 2"	23' 1"	21' 10"	20' 8"	19' 10"	19' 1"
12"	12-ic-3	22' 11"	21' 8"	20' 8"	19' 11"	19' 2"	24' 8"	23' 2"	22' 0"	21' 1"	20' 4"
	12-ic-4	24' 1"	22' 10"	21' 10"	21' 0"	20' 4"	26' 1"	24' 7"	23' 5"	22' 5"	21' 6"
14"	14-ic-3	25' 1"	23' 8"	22' 8"	21' 10"	21' 1"	27' 4"	25' 8"	24' 5"	23' 5"	22' 6"
	14-ic-4	26' 7"	25' 0"	23' 11"	23' 0"	22' 2"	28' 11"	27' 2"	25' 11"	24' 10"	23' 11"
16"	16-ic-3	27' 6"	25' 11"	24' 7"	23' 8"	22' 11"	29' 11"	28' 1"	26' 8"	25' 7"	24' 6"
	16-ic-4	29' 1"	27' 5"	26' 1"	25' 0"	24' 2"	31' 8"	29' 10"	28' 4"	27' 1"	26' 1"
18"	18-ic-4	31' 8"	29' 10"	28' 4"	27' 1"	26' 1"	34' 5"	32' 5"	30' 10"	29' 5"	28' 5"

NOTES

Spans have been based on review for Strength Deflection, Vibration, and Construction Loads.

See full Composite TotalJoist® tables online for complete notes regarding the criteria assumed..

For vibration, Full Height Partitions in the spans charts are assumed to be non-load bearing but they will have significant impact on the spans as shown.

Joists are assumed to be supported by walls at each end.

Floors do not require shoring during construction.

Dead loads shown are superimposed and are in addition to the self weight of the floor.

Tables are meant as a guide only. Contact us for further analysis regarding increasing spans, different boundary conditions, slab, thickness, etc..



COULD COMPOSITE TOTALJOIST BE RIGHT FOR YOUR NEXT PROJECT?

We'd be happy to provide more information
about our systems, answer questions, or
review drawings for your upcoming project.



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