

# OC™ LUMBER FOR DECK FRAMING DROP BEAM SPAN PERFORMANCE



OC<sup>™</sup> Lumber for deck framing is a rotproof, rustproof composite alternative to wood and steel. It is designed to install like the lumber you use every day, and deliver performance that enables safe, resilient, and durable structures.

#### Drop Beam Span Performance

#### Standards and testing methods

#### ASTM D7147

Standard Specification for Testing and Establishing Allowable Loads of Joist Hangers

#### ASTM D6109

Flexural Properties of Unreinforced and Reinforced Plastic Lumber and Related Products

#### ASTM E84

Surface Burning Characteristics of Building Materials



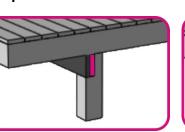


Performance data collected and published by DRJ Engineering, April 2023

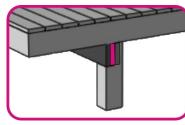
DECK	DROP BEAM CONFIGURATION		BEAM SPAN	MAX BEAM DEFLECTION	REFERENCE LIMIT
BOARD DIMENSION	BEAM	# OF PILES	(ft)	(in)	(L/360)
2"x 8"	2"x8" joist	2	16	0.625	0.53
	2"x8" joist	2	12	0.260	0.4
	2"x8" joist	2	10	0.167	0.33
	2"x8" joist	3	10	0.140	0.33
	2"x8" joist	3	16	0.543	0.53
	laminated 2"x6"	5	10	0.161	0.33
	laminated 2"x6"	5	16	0.492	0.53
2"x 10"	2"x10" joist	2	10	0.114	0.33
	2"x10" joist	3	10	0.097	0.33

2 Boards Drop Beam

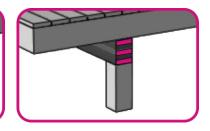
Drop Beam



3 Boards Drop Beam



### 5 Laminated Boards Drop Beam



Finite Element Analysis via Computational Modeling was validated through third-party tested results for 10' deck span and 10' beam span, using 2x8 at 24" on center joist spacing.

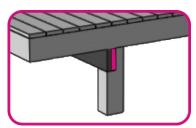
## HOW WE BUILD NOW

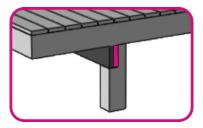
Drop Beam Span Performance (10' deck span)

DECK	DROP BEAM CONFIGU	L/360		
BOARD DIMENSION	BEAM	# OF PILES	FOR 10' DECK SPAN	
2"x 8"	2" x 8" joist	2	13'	
2 8 0	Laminated 2" x 6"	5	14'	
2"x 10"	2"x10" joist	2	20'	

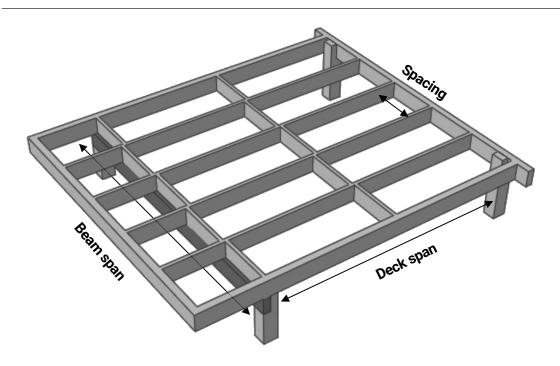
(2) 2" x 8" Drop Beam

(5) Laminated 2" x 6" Drop Beam (2) 2" x 10" Drop Beam





Spans & Spacing





HOW WE BUILD NOW

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https://www.owenscorning.com/

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