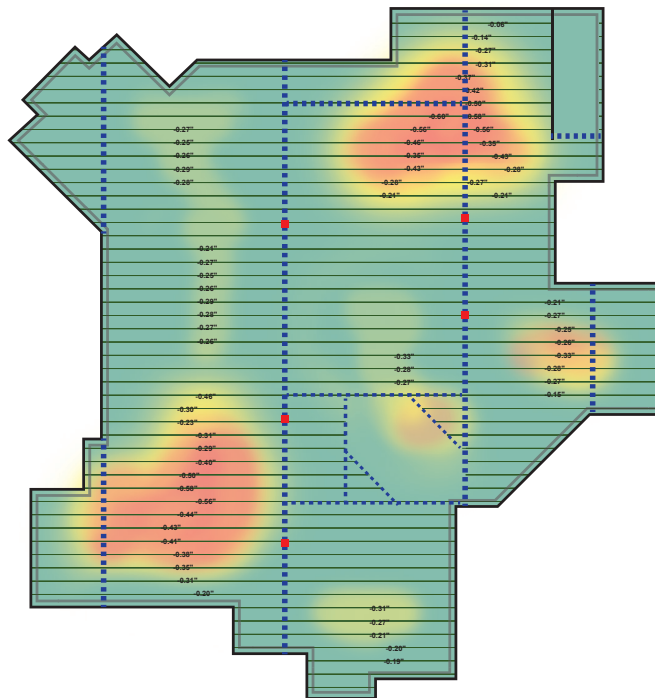




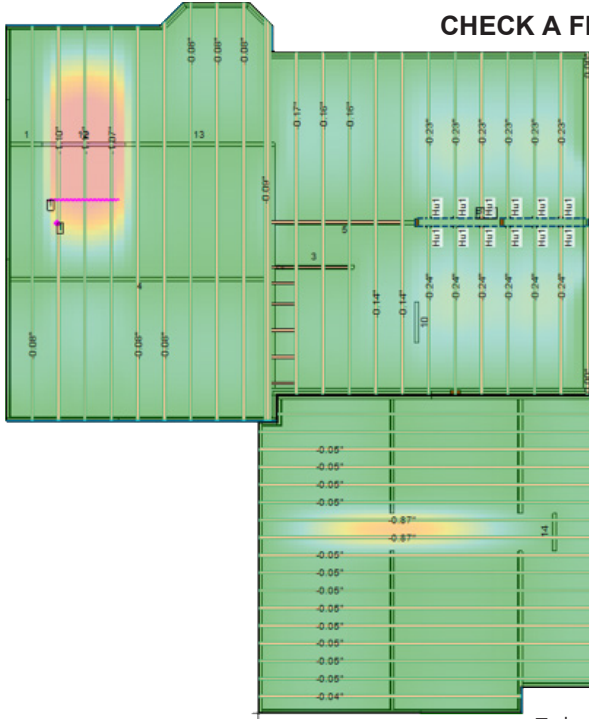
Boise Cascade
Engineered Wood Products

INTRODUCING A NEW WAY TO IDENTIFY AND REMEDY FLOOR PROBLEMS IN THE DESIGN PROCESS:



How often have you heard about a homebuyer's problem with a floor system? No one caught it even in multiple walk-throughs, but now that they're moved in and using every room, there's that persistent problem floor. Whose fault? Who has to fix it? That it's code compliant may not be enough these days. And floor system deflection, vibration and sheathing deflection are often afterthoughts, unfortunately when discovered, already installed. But now, there's a solution: It's called BC FloorValue® and it's a new proactive approach to identifying issues when the floor is being designed -- so what could be a huge problem is resolved in minutes.

CHECK A FLOOR PLAN IN MINUTES:



This new engineering-based tool is an integral part of BC FRAMER® and can check a floor plan for problems in minutes, compare costs, let you choose alternative upgrades, and move ahead immediately knowing your floor framing is the optimal combination of quality and price. It's called BC FloorValue®, from Boise Cascade, and it's an engineering-based way to proactively identify problems before they get to the field. It identifies floor issues and helps eliminate problems, dissatisfied customers, callbacks and additional costs associated with resolving the issue.

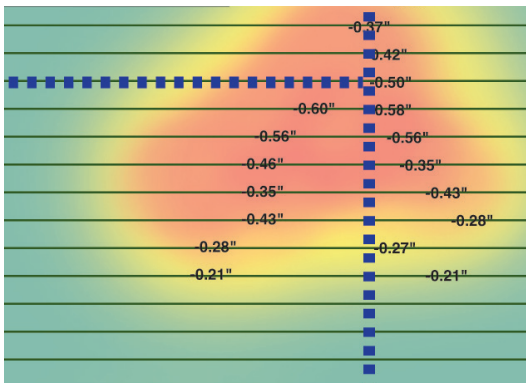
WAS THE PLAN OVERDESIGNED?

You can evaluate different product series, on-center spacing and sheathing thickness for the optimum price/value relationship. This tool can also be used to specify less expensive framing without negatively impacting the floor, because better floor systems don't necessarily cost a lot more money. Floors in different parts of the home can now easily have different characteristics – stiffer members under tile floors in the entry and bathrooms, more forgiving floors under carpet in bonus rooms, closets and the like. BC FloorValue® can help you ensure that every floor has the right level of performance for its intended use. It's designing with homeowners in mind, with floor ratings of Standard,

Enhanced or Premium that are easy to explain to the customer.

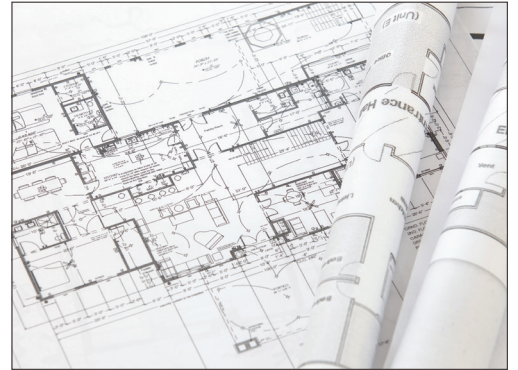
So, how does BC FloorValue® work?

A FLOOR DEFLECTION “HEAT MAP” PINPOINTS DEFLECTION PROBLEMS:



A visual “Heat Map” identifies areas of floor system deflection – a first in the industry and a graphic display to identify problems taking into account all members and the floor system as a whole.

- BC FloorValue® evaluates the entire floor as a system, not as isolated members, taking into account joist, sheathing and support stiffness contributions to the system's performance.
- Considering deflection of all supporting members and analyzing the floor as a system helps to identify areas where a low spot may occur that was not obvious from the individual member analysis.
- BC FloorValue® alerts the user to locations of differential deflection across the floor system – those annoying humps and dips that previously were only discovered after construction. By helping identify potential problem areas where occupants will notice uneven floor deflection during the design phase, it can help avoid costly repairs and damage to your reputation.



ANALYSIS RATES THE VIBRATION PERFORMANCE:

BC FloorValue® analyzes vibration and ranks the floor system on an easy-to-understand scale. If the analysis tells you it's only a Standard floor, you can easily evaluate ways to get it up to a higher rating, often for little or no additional cost.

- It identifies the overall vibration characteristics of the floor system and the worst performing joist or beam.
- Occupant perception of floor performance is highly subjective and we all know you can't please everyone. BC FloorValue's simple 3-tier rating system is underpinned by decades of industry history with floor joist deflection ratios and vibration performance and balances science with simplicity to satisfy most homeowners.
- BC FloorValue's vibration analysis is based on structural analysis principles familiar to most structural engineers.

BC FloorValue™ Results							
	Floor Systems	Modeled Materials	Rating	Selected Materials	Rating	Cost Change	% Change
					Total:	\$123.78	25%
	Basement						
▶	FC2	11-7/8" BCI® 6000-1.8 DF-24" o.c.s.	Standard	11-7/8" BCI® 6000-1.8 DF-19.2" o.c.s.	Enhanced	\$55.28	18%
		3/4" 4x8 OSB	Code minimum	7/8" 4x8 OSB	Premium	\$68.50	39%

A SHEATHING-TO-JOIST ANALYSIS THAT ASSURES IT'S UP TO THE JOB:

- BC FloorValue® includes the contribution of sheathing span between joists to overall feel and evaluates the worst case sheathing span perpendicular to framing members – an often overlooked component of floor performance that is exclusive to BC FloorValue®.
- It compares sheathing spans to the sheathing manufacturer's span rating and classifies the sheathing for each floor into one of four categories (Code Minimum, Standard, Enhanced, Premium).
- BC FloorValue® helps identify potential problem areas where occupants will notice soft spots between joists with flexible floor coverings.

THEN BC FLOORVALUE® SUGGESTS OPTIONS TO REMEDY PROBLEMS AND LAYS OUT COSTS FOR THE UPGRADES:

BC FloorValue® Results

	Floor Systems	Modeled Materials	Rating	Selected Materials	Rating	Cost Change	% Change
▶		A		B	Total:	(\$790.02)	-18%
	Basement						C
	BM1 in system FC1	1-3/4" x 9-1/2" VERSA-LAM® 2.0 2800 DF 2-ply	Premium	1-3/4" x 14" VERSA-LAM® 2.0 2800 DF 2-ply	Premium	\$31.30	3%
		1-1/8" 4x8 OSB	Premium	3/4" 4x8 OSB	Premium	(\$419.41)	-44%
	FC3	9-1/2" BCI® 6000-1.8 DF-16" o.c.s.	Premium			\$0.00	0%
		1-1/8" 4x8 OSB	Premium	3/4" 4x8 OSB	Premium	(\$239.43)	-44%
	1st Floor						
	FC2	11-7/8" BCI® 6000-1.8 DF-16" o.c.s.	Premium	11-7/8" BCI® 6000s-1.8-24" o.c.s.	Premium	(\$162.48)	-22%
		1-1/8" 4x8 OSB	Premium			\$0.00	0%

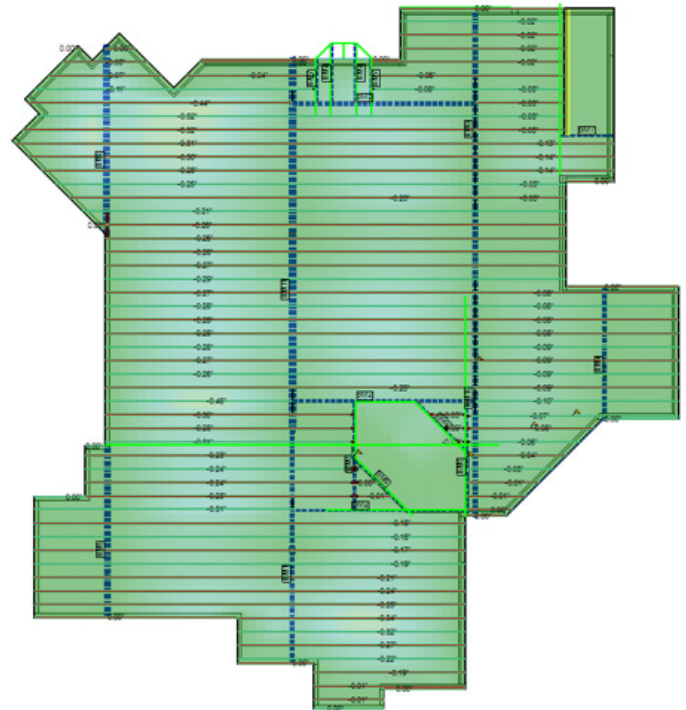
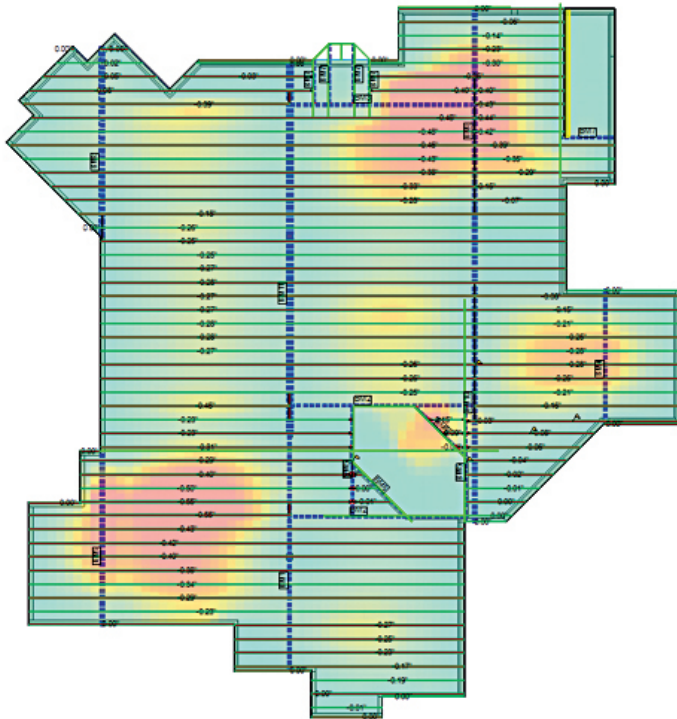
- BC FloorValue® provides value-added options for joists and spacing, supporting beams and floor sheathing to enable efficient upgrading or ways to reduce the floor system cost while maintaining performance if that's the goal.
- The change could be upgrading one beam at a cost of \$212 or ten BCI® joists totaling \$314 – or more, or less. Designers are in complete control of which components are changed to achieve their desired balance of cost and performance.
- It provides relative costs of alternatives for each floor system and total package cost. The designer can present one or more alternatives to the original spec without having to edit the drawing.

BC FLOORVALUE® WORKS SIDE-BY-SIDE WITH STRUCTURAL ANALYSIS, GOOD JUDGMENT AND QUALITY CONSTRUCTION PRACTICES:

- BC FloorValue® works together with a structural analysis to provide a complete evaluation. Members must still be designed to ensure structural adequacy of modeled members or new framing options.
- BC FloorValue® does not replace the need for good design and good judgment – it is a tool enabling designers to quickly make better overall decisions about floor performance. Designers still must consider the impacts on floor performance from floor coverings and loads from design features like islands and bars and furnishings such as pianos and pool tables.
- Every floor design is only as good as the installation. Adhering to Boise Cascade's installation instructions and details is paramount to ensuring the design translates through to implementation.

FOR SALE: PEACE OF MIND:

Cost optimization will help in quoting competitive floor packages with the ideal balance between cost and performance while providing builders a cost-effective floor package with desired performance. With BC FloorValue® you can begin to see just one of the new products that kept Boise Cascade busy during the great recession. While others were cutting back, Boise Cascade was creating more innovative products and services to help their dealer customers operate more profitably. For more information or to get started with BC FloorValue®, call 800-405-5969.



Boise Cascade
Engineered Wood Products

Great products are only the beginning.®

www.BCewp.com
or call 800-405-5969