

# **Building Bulletin**

## Composite and Alternative Decking and Guard Materials

## **IMPORTANT: DECK SUPPLIERS AND BUILDERS**

As we approach deck building season, we wanted to take this opportunity to update and inform our valued customers regarding the use of composite and alternative decking and guard materials. The Ontario Building Code (OBC) prescribes specific materials (ex. wood) to be used for deck construction. Where materials other than those prescribed are proposed (ex. composite) specific Canadian testing or Ontario engineering may be required. This required testing or engineering is usually the responsibility of the Manufacturer to obtain, and not all products available have the required testing or engineering. If a product you plan to use or sell falls into this category, the City MUST have the required testing and/or engineering to approve its use and issue the building permit. There are options for the product to gain compliance with the OBC which are outlined in more detail below.

### **Alternative Decking Products**

Currently the only decking material prescribed in the OBC is wood decking, minimum 5/4" thick. The City of Kitchener Building Division will also allow alternative decking materials for low-rise residential projects where the product / materials have any one of the following;

- 1. A valid Building Material Evaluation Commission (BMEC) authorization from The Ministry of Municipal Affairs and Housing (MMAH),
- 2. A valid Canadian Construction Materials Centre (CCMC) evaluation from the National Research Council (NRC), **or**
- 3. A detailed engineering / testing report sealed by a Professional Engineer of Ontario confirming the product details, including but not limited to, specifying the specific decking product manufacturer and product name, limitations, etc.

To date the following alternative decking products are acceptable; (Note: this list is subject to change without notice where the testing or engineering expires or the OBC requirements update)

- AZEK Timbertech Harvest
- Craft-Bilt (Aluminium Decking)
- DecKorators Voyage
- Fiberon GoodLife
- Fiberon Paramount
- Fiberon Sanctuary
- Inteplast Deck
- Inteplast Porch
- Moisture Shield Vantage
- Moisture Shield Visions

- Trex Enhance (pending updated engineering)
- Trex Select (pending updated engineering)
- Trex Transend (pending updated engineering)
- TruNorth Deck Accuspan
- TruNorth Deck Clubhouse PVC
- TruNorth Deck NorthernLite
- TruNorth Deck EnviroBoard
- Veranda Elite
- Veranda HP
- Wolf Serenity
- Wolf Serenity Porch Decking

If you wish to use or sell a product not noted in this list, please submit the required BMEC, CCMC, or Engineer Report for review.

### **Guard / Railing Materials**

The OBC has very prescriptive requirements for guards and has guard construction details in the Supplementary Standard SB-7 to the OBC. These details are <u>only for wood guards</u> and illustrate exactly how a guard is to be constructed. Wood guards that are not constructed in accordance with these details, and guards constructed partly or wholly of aluminium, steel, or glass (including prefabricated guards), will be required to be designed by a Professional Engineer of Ontario, and conform to the loading and design requirements set out in the OBC.

Guards that are constructed of a material other than wood, aluminium, steel, or glass (i.e. composite, vinyl, etc.), approval from BMEC or CCMC is required. In Kitchener, an Ontario Engineer Report alone is not sufficient for OBC compliance. To date we are not aware of a guard product that has been approved by BMEC or CCMC that is not wood, aluminium, steel, or glass.

As the designs aesthetics of guards are constantly changing it is important to be aware that the OBC regulates several safety items such as;

- 1. Minimum guard height,
- 2. Non-climbable (i.e. no horizontal or climbable elements between 140 mm ( $5\frac{1}{2}$ ") and 900 mm ( $35\frac{1}{2}$ ") above the walking surface), and
- 3. Loads on Guards. (Guards not built per Supplementary Guidelines SB-7 will require a Professional Engineer to verify the guard conforms to the OBC, including fastening to the deck, porch, or house.)

The purpose of this notice was to remind customers of our requirements and provide advance notice before materials are ordered. We are fully aware new products come on the market and these products must be tested and/or engineered for use in Kitchener. It is also important to note that some companies provide testing results from other Countries and with little or no testing results from Canadian Tests. Unfortunately, these test results are not accepted.

The City of Kitchener's goal is to review and inspect for compliance with the OBC on construction projects. We trust that if you have any additional questions or comments that you will not hesitate to contact us.

Regards,

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Cc via post:

Fairway Lumber Company Ltd.

Gillies Lumber Inc.

Home Depot (Kitchener, Waterloo & Cambridge) Lowes (Kitchener, Waterloo & Cambridge)

Swanson's Home Hardware Building Centre

RONA - BFD Building Centre

Weber Home Centre