Moisture Control of Glulam

The checking of wood is due to differential shrinkage of the wood fibres in the inner and outer portions of a wood member. Glulam is manufactured from lamstock having a moisture content of 7 to 15 percent. Because this range approximates the moisture conditions for most end uses, checking is minimal in glulam members.

Proper transit, storage and construction methods help to avoid rapid changes in the moisture content of laminated members. Severe moisture content changes can result from the sudden application of heat to buildings under construction in cold weather, or from exposure of unprotected members to alternate wet and dry conditions as might occur during transit and storage.

Canadian glulam routinely receives a coat of protective sealer before shipping and is wrapped for protection during shipping and erection. The wrapping should be left in place as long as possible and ideally until permanent protection from the weather is in place.

During on-site storage, glulam should be stored off the ground with spacer blocks placed between members. If construction delays occur, the wrapping should be cut on the underside to prevent the accumulation of condensation.