Defect Advisory Report WI 143216: Web Stiffeners and I-Joist Design

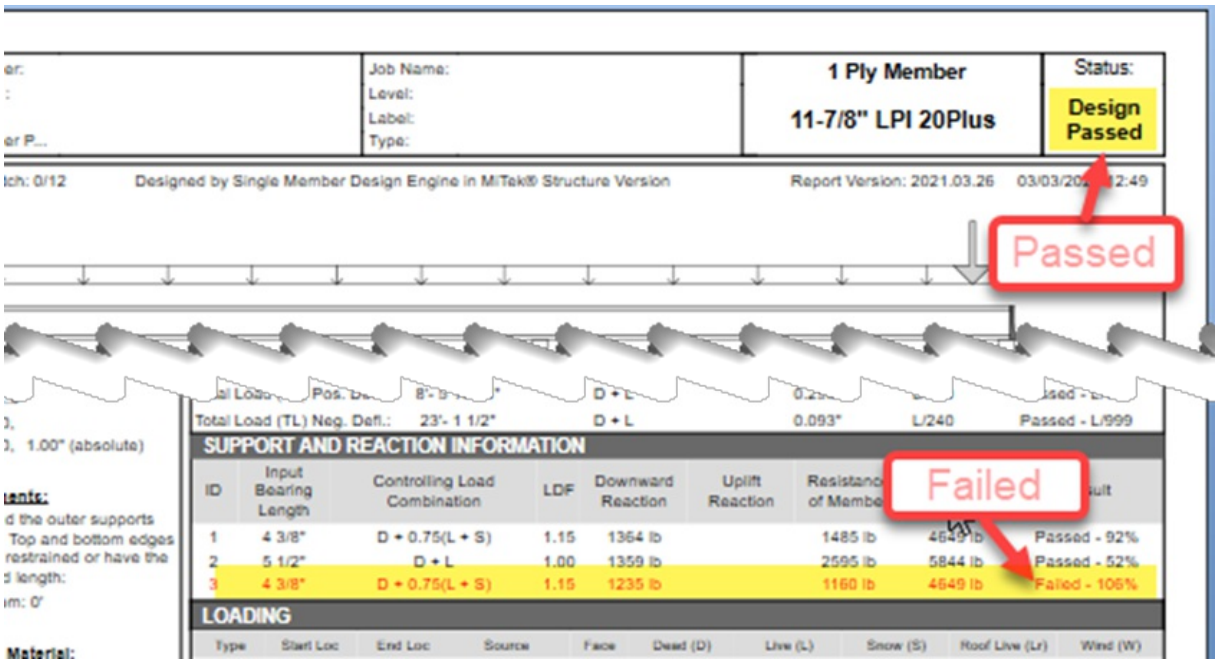
Last Modified on 03/10/2022 11:07 am MST

Date: March 8, 2022

Description

When an I-Joist is designed, higher reactions can be used when a web stiffener is added to the joist at the bearing. In some scenarios, MiTek Structure is not accounting for the additional reaction that an I-Joist can utilize with web stiffeners. In these instances:

- The overall member design status displays, “Passed.”
- However, the "Support and Reaction Information" section of the member report indicates “Failed.”



This issue impacts US designs. MiTek's initial testing showed that the issue could not be duplicated with Canadian designs. Further investigation will determine if this is the case.

- **MiTek recommends that all users verify EWP member reports to ensure there are not failures in the “Support and Reaction Information” section.**

Notes

- This issue does not affect the design of rectangular EWP or dimensional lumber.
- This issue does not affect the design of trusses.
- This issue does not affect the design of Boise Cascade products.
  - Boise products are designed by an engine provided by Boise Cascade.

Severity

- Severity Level 1

Action Plan

- MiTek is working on a fix for this issue, however, there is not a timeline on when the fix can be distributed.

- When the fix is ready for distribution, versions 8.5.0 and newer will be updated.
- Customers running a version prior to 8.5.0 are encouraged to update to a newer version.

Workaround

If a member's overall Status is "Passed," yet one of the supports reports "Failed," the member should have passed with the addition of a bearing stiffener at the "Failed" support.