

June 27, 2022

Re: FastPaks Structural Analysis Findings

To whom it may concern:

Select Structural Engineering (SSE) has completed analysis of the FastPaks structure per the drawing revisions dated May 26, 2022. Analysis work was performed using provisions from the following specifications:

- 2015 International Building Code (IBC 2015)
- 2010 American Society of Civil Engineers "Minimum Design Loads for Buildings and Other Structures" (ASCE 7-10)
- 2010 American Institute of Steel Construction "Specification for Structural Steel Buildings" (AISC 360-10)
- 2012 American Iron and Steel Institute "North American Standard for the Design of Cold-Formed Steel Structural Members" (AISI-S100-12)

An importance factor of 1.00 corresponding to a Risk Category of II was assumed for all calculations.

SSE rates the FastPaks floor framing system for the following structural loading:

Dead load= 10 psf (additional loading excluding the weight of FastPaks framing elements)
Live load = 50 psf

SSE has also determined that, while a temporary structure, the FastPaks framing system could reasonably be expected to survive the following atmospheric loading in addition to a 10 psf roof dead load rating (additional loading excluding the weight of the FastPaks framing elements) in addition to the floor loadings discussed above:

Snow loading = 100 psf
Wind loading = 115 mph (All exposures; $K_{zt} = 1.0$)

Given the classification as a "temporary" structure, a specific seismic analysis was not performed. However, the structure meets all requirements to be erected and occupied in regions with seismic design category A, B, or C. local building codes should be consulted for use in areas of higher seismic activity.

Note: The FastPaks structure is a non-permanent or auxiliary structure and should not be considered a permanent shelter for human occupancy. The load rating provided is for reference to prevent failure of the assembly due to installation in unsuitable environments.

Report by Andrew Sederquist, PE, SE

