## Structura Logica

**Construction Logic** 

Building Consulting ● Engineering 18901 East 299<sup>th</sup> St. Harrisonville, MO 64701 <u>structura@embargmail.com</u>, 816.872.4883

Mr. Kent Bilquist
Ward Development
1120 NW Eagle Ridge Blvd.
Grain Valley, Missouri 64029
(816)365-5929, kent@safetyministorage.com

RE: PERMIT #PRCOM20201168,
ROOF TOP UNIT VERIFICATION
PICK-UP USA
2724 NE MCBAINE DR.
LEE'S SUMMIT, MISSOURI

Dear Mr. Bilquist:

This is to document the acceptable installation of two sizes of mechanical roof top units associated with the above captioned project. A mechanical plan prepared by Casburn Consultants, Sheet M101, dated May 4, 2020 was reviewed. A smaller 7.5 ton unit weighs 1,137 lbs. The larger, 15 ton unit, weighs 2,175 lbs and spans across at least two bar joists. The longest joist span for this maximum weight is 55 feet and the unit shown in mechanical drawing to be about 12-13 feet from the end opposite the exterior wall. The second condition with the same larger RTU is proposed at an interior joist with a span of 50 feet. This RTU is proposed at the approximate center of the joist's 50 foot span.

As part of the original building and roof joist design, an average weight per square foot was assumed for future mechanical equipment. Once a specific design is proposed, an evaluation would be necessary to confirm acceptability of the RTU selected. The evaluation includes conditions with the dead load, snow loads including applicable snow drift and the proposed mechanical unit's weight and specific location.

From a structural perspective, the proposed design shown the above mechanical plan is acceptable.

Sincerely,

Structura Logic,

Anthony Meister, P.E.