

October 17, 2017

Defcon Underground MFG
Kansas City, MO

RE: Underground Bunker

To Whom It May Concern:


Raker Rhodes Engineering has reviewed the load carrying capacity of the bunker designed by Defcon Underground MFG consisting of steel tube frames with steel channel purlins and steel plate wall panels. The bunker can withstand the following loads imposed by structure dead load, soil pressure (vertical and lateral), and superimposed live load:

- Shelter weight
- 12" reinforced concrete roof (optional, see below)
- 3' of soil fill (above steel bunker roof)
- 100 lb/sqft live load (sufficient for parked automobile or pickup)

When encased in reinforced concrete, the bunker can withstand the following additional apparent aerial blast pressure:

- 2500 lb/sqft (17.3 psi)

Regards,



Matt Enstrom, PE
Director – Kansas City
Raker Rhodes Engineering, LLC

