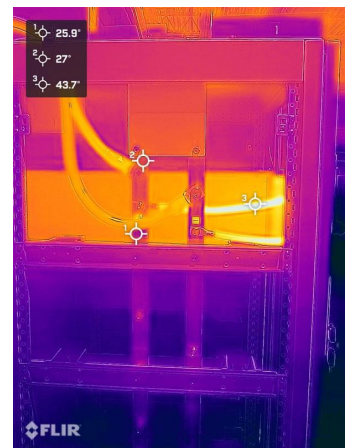


FlexRack Technical Notes 8/02/21

1. Do not connect more than 400A of charging/discharging capacity to the FlexRack.
 - a. Ex. Two inverters with 185A max charge capability = $185A \times 2 = 370A$.
2. The FlexRack does not come with battery cables.
 - a. For battery-to-busbar cables, use 9" and 13" [#4 AWG or greater flexible cable](#). Both ends of 9" cable made with regular [straight compression lugs](#).
 - i. One end of 13" cable requires [compression lug with a 45 degree kick](#).
 - ii. #4AWG flexible cable is required for FlexRack-to-battery cable run to maintain NEC minimum bending radius.
 - b. When installing parallel inverters, parallel conductors require landing on both sides of the busbar bolt
 - i. When paralleling conductors, one negative inverter-to-battery conductor compression lug will require a 45 degree kick - see example materials.
 - ii. ***Do not use "double barrel" universal terminal lugs inside the FlexRack. They are too large to maintain adequate clearance.***
3. The Flexrack maintains a protected 1/2" clearance from cabinet side walls to energized parts components per NEC 310.10(3) even when the sidewall is deflected inward.
4. While the included 2.5" knockout is intended for parallel battery conductors to be run to directly to an inverter or raceway, you are welcome to use a hydraulic punch to knockout your own holes for parallel cable runs via conduit or cord grip.
5. The FlexRack busbar is not listed. Your AHJ may require a thermal scan at full operating capacity for 1 hour to demonstrate suitability. Here is our thermal scan after running an assembled FlexRack for 1 hour, maxing out the maximum eFlex amperage rating of 100A per eFlex):



Example Material List for 4 eFlex + 1 Battery Inverter

Item	Part Number	Quantity
3/8ths Compression Ring Lug AWG #4 Fine Stranded Straight	Burndy YAV4CLTC38FX	12 + extras
3/8ths Compression Ring Lug AWG #4 Fine Stranded 45 Degree	Burndy YAV4CLTC38FX45	4 + extras
9" AWG #4 Flexible Cable	CobraWire C9904B	4 + extras
13" AWG #4 Flexible Cable	CobraWire C9904B	4 + extras
3/8ths Compression Ring Terminal AWG #4/0 Regular Stranded Straight	Burndy YA28TC38 *Actual Wire Gauge Can Vary Depending on Inverter	2 + extras
X" AWG 4/0 Regular Stranded	*Actual Wire Gauge Can Vary Depending on Inverter **Wire Length depends on Inverter Location	2 x Length to Inverter

Note 1: Part numbers are non-mandatory examples.

Note 2: It is possible to reduce FlexRack-to-Inverter cable AWG if using flexible instead of stranded cable and abiding by *NEC Table 400.5 Footnote 1*.

Note 3: Battery cables can be red + black colored or phased taped.

Note 4: Verify crimp tool is rated to crimp wire gauge.

Example Material List for 4 eFlex + 2 Battery Inverter

same as above except...

3/8ths Compression Ring Terminal AWG #4/0 Regular Stranded Straight	Burndy YA28TC38 *Actual Wire Gauge Can Vary Depending on Inverter*	3 + extras
3/8ths Compression Ring Terminal AWG #4/0 Regular Stranded 45 Degree	Burndy YA28TC3845 *Actual Wire Gauge Can Vary Depending on Inverter*	1 + extras
X" AWG 4/0 Regular Stranded	*Actual Wire Gauge Can Vary Depending on Inverter **Wire Length depends on Inverter Location	2 x Length to Inverter