

181 LONG HILL ROAD, BLDG 4, SUITE 1 LITTLE FALLS, NJ PH: 973-223-8813

March 14, 2022

OEG Building Supplies 6001 Bordentown Ave. Sayreville, NJ 08872

RE: OEG Bridge Clip Analysis

At your request, we evaluated the capacity of the OEG 54 Mil clip, 68 Mil, and 97 mil bridge clip. The clips have been evaluated to restrain bridging forces if cold formed cee studs. The following are the assumptions made:

- All studs will be standard cee shapes with webs ranging from 2-1/2" min. to 8" max.
- Cold rolled bridging will be constructed of 54 mil x 33 ksi material.
- Standard knock-outs in cold formed studs will be used.
- Clip will be securely bearing on stud web and attached to bridging with (2) #10 screws per clip.
- Evaluation is based on 2012 AISI North American Specification for the Design of Cold Formed Steel Structural Members (AISI S100).

The clips have been evaluated for the failure modes of clip tension yielding, clip tension rupture, clip bearing, screw capacity, and web knock out local bending. The following tables establish the capacities of the clips:

## 54 Mil Clip

Stud Thickness mil (ga.)	33 (20)	43 (18)	54 (16)	68 (14)	97 (12)	118 (10)
Allowable Brace strength (#)	118	194	297	370	NR	NR

NR= Not Recommended

## 68 Mil Clip

Stud Thickness	22 (22)	40 (40)	( )	60 (4.4)	07 (10)	110 (10)
mil (ga.)	33 (20)	43 (18)	54 (16)	68 (14)	97 (12)	118 (10)
Allowable Brace						
strength (#)	NR	NR	297	370	370	NR

NR= Not Recommended

## 97 Mil Clip

Stud Thickness mil (ga.)	33 (20)	43 (18)	54 (16)	68 (14)	97 (12)	118 (10)
Allowable Brace strength (#)	NR	NR	NR	370	370	370

NR= Not Recommended

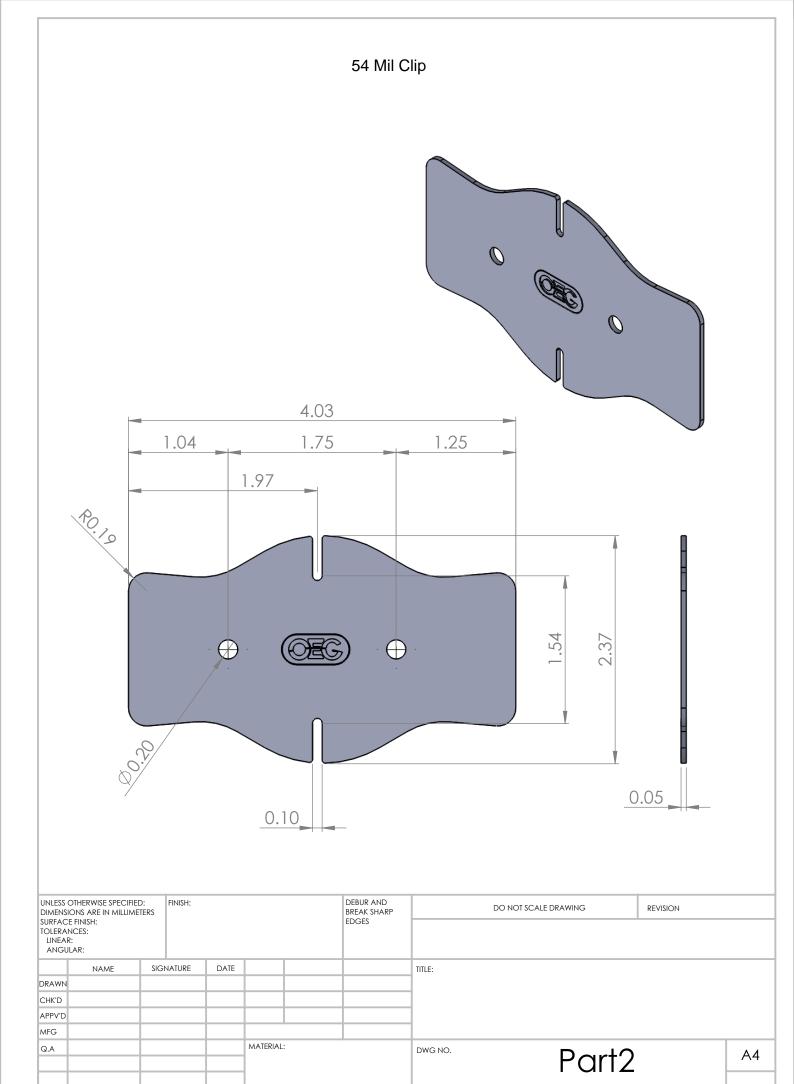
The values presented are a conservative numerical evaluation. To increase the capacity of the screws I recommend using test data and application of a safety factor.

If you have any questions, please be sure to let me know.

Respectfully Submitted,

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Brian J. Norby, P.E.



SCALE:1:2

WEIGHT:

SHEET 1 OF 1

