

October 1, 2020

C-39980

Neuvokas Corporation
3206 #6 Road
Ahmeek, MI 49901

Re: GatorBar® in Residential Foundations subject to IRC 2015

Dear Mr. Kero:

It is my professional opinion, as a registered professional engineer in the State of Pennsylvania, that #3 GatorBar® as manufactured by Neuvokas Corporation, (Neuvokas) may be substituted for traditional #4 steel rebar in the conditions described below for a one- or two-family residential wood-framed construction which is subject to the requirements of the International Residential Code (IRC) 2015 edition.

Horizontal Steel Reinforcement in Foundation Walls –IRC Section Table 404.1.2(1) specifies the minimum required horizontal reinforcement in foundation walls (subject to compliance with Table R608.3). That steel reinforcing is specified to be #4 steel bars (at a certain spacing) and location and a minimum yield of 40,000 psi. The tensile capacity of the #3 GatorBar exceeds the tensile strength of the required minimum rebar and therefore in my opinion would exceed the minimum required by IRC 2015.

Longitudinal Steel Reinforcement in Foundation Wall Strip Footings –IRC Section R403.1.3 specifies the minimum required continuous reinforcement in cast concrete footings subject to Seismic Design Categories D0 D1 and D2 foundation walls. That steel reinforcing is specified to be one #4 steel bar. Section R403.1.3.1.5.1 specifies that reinforcing in cast concrete footings shall have a minimum yield of 40,000 psi. The tensile capacity of the #3 GatorBar exceeds the tensile strength of the required minimum rebar and therefore in my opinion would exceed the minimum required by IRC 2015.

A sketch illustrating the above discussed acceptable locations (based on IRC 403.1.3) is seen below.



A FULL-SERVICE CIVIL ENGINEERING FIRM

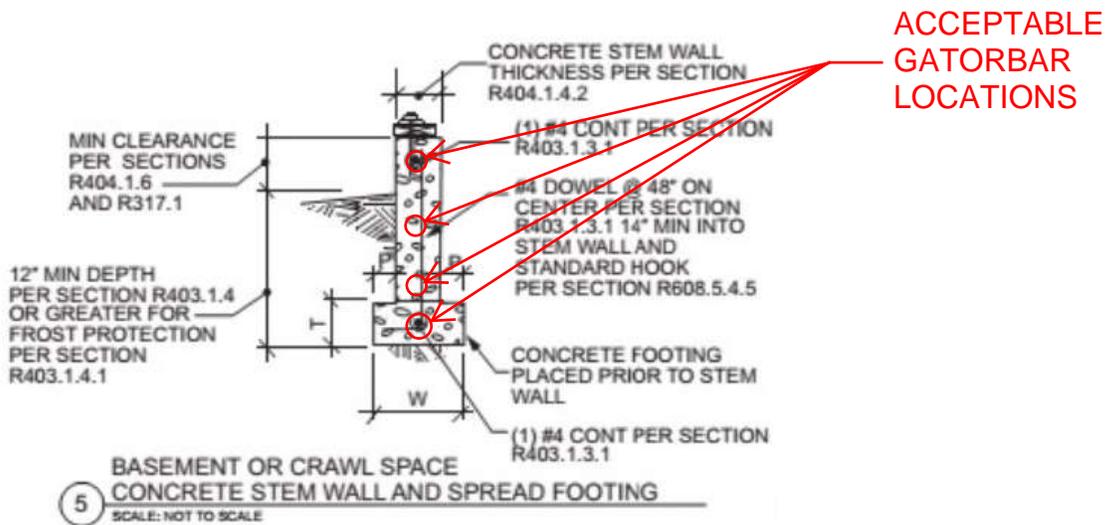
The above is my professional opinion based on my understanding of the applicable sections of IRC 2015 and based on my review of the GatorBar, by Neuvokas, material properties.

Please let us know if you have any questions or concerns.

Sincerely,
THE GATEWAY ENGINEERS, INC.

Kevin M. Nadalin, P.E.
Project Manager

PA PE-086453



SKETCH: ACCEPTABLE GATORBAR LOCATIONS