



CSI 31 60 00
PRODUCT: Earthwork
DIVISION: Special Foundations and Load-Bearing Elements
SECTION: N/A

Report Holder
Composite Panel Systems, LLC
130 S Willow St.
Eagle River, Wisconsin 54521

Manufacturing Location(s)

Fiber-Tech Industries, Inc.
2000 Kenskill Ave
Washington Court House, OH 43160

1. SUBJECT

1.1 Composite Footing Panels, Foundation Panels 2-in. thick, 18-in. wide, and up to 56-ft long.

2. SCOPE

ICC NTA, LLC has evaluated the above product(s) for compliance with the applicable sections of the following codes:

- 2.1** 2015, 2018 International Building Code (IBC)
- 2.2** 2015, 2018 International Residential Code (IRC)

ICC NTA, LLC has evaluated the above product(s) in accordance with:

- 2.3** NTA IM 036 Quality System Requirements
- 2.4** NTA IM 049.2 SEP 01 Composite Footing Panel Standard Evaluation Plan

ICC NTA, LLC has evaluated the following properties of the above product(s):

- 2.5** Structural performance under axial gravity loads.

To obtain the most current ICC NTA NER Report, visit www.icc-nta.org/report-search/.

3. USES

3.1 General. *Composite Footing Panels* are used as panels capable of supporting and distributing axial compressive loads from the foundation walls across a prepared soil from 2000 psf to 4000 psf compressive strength. Uplift and lateral loads are outside of the scope of this report.

3.2 Construction Types. *Composite Footing Panels* shall be considered combustible building elements when determining construction types in accordance with IBC Chapter 6. (IM 049.2 SEP 01 NACU2)

3.3 Below Grade Use. *Composite Footing Panels* may only be used below grade. (IM 049.2 SEP 01 ACU1)

3.4 Frost Protection. Except where otherwise protected from frost, *Composite Footing Panels* shall be protected from frost in accordance with Section 1809.5 of the IBC. The footing panels shall not bear on frozen soil unless such frozen conditions are of a permanent character, in accordance with IBC Section 1809.5. (IM 049.2 SEP 01 NACU5)

4. DESCRIPTION

4.1 General. *Composite Footing Panels* are factory-assembled, fiberglass and resin-faced panels laminated to a preformed (honeycomb) polypropylene core. The product is intended for use as a foundation panel subjected to axial compressive loads. The product is available a nominal 2-in. overall thickness. The product is manufactured under factory-controlled conditions in a maximum manufactured size of 18-in. wide and up to 56-ft. long.

4.2 Materials

4.2.1 Facing. The facing consists of a proprietary fiberglass system. The top and bottom facings are formed directly on the honeycomb material.

4.2.2 Core. The core material is polypropylene in a honeycomb pattern.

4.2.3 Adhesive. Facing materials are adhered to the core material during the facing formation process. The facing formation process is completed in accordance with the in-plant quality system documentation.

4.2.4 Material Sources. The facing and core materials used in the construction of the *Composite Footing Panels* are from approved sources as identified in the in-plant quality system documentation. Materials used for footing panels shall contain no cellulosic material. (IM 049.2 SEP 01 NACU3)

5. DESIGN

5.1 Overall Structural System. The scope of this report is limited to the evaluation of the *Composite Footing Panel* component. Details related to incorporation of the product beyond that scope are the responsibility of the designer of record.

This NER report is intended to indicate that ICC NTA, LLC has evaluated the product described and found it to be eligible for labeling. Product not labeled as specified herein is not covered by this report. ICC NTA, LLC makes no warranty, either expressed or implied, regarding the product covered by this report. For more information or questions regarding this report please contact NTA at 1-833-NER-HELP (833-637-4357).





CSI 31 60 00

PRODUCT: Earthwork

DIVISION: Special Foundations and Load-Bearing Elements

SECTION: N/A

5.2 Design & Allowable Loads. *Composite Footing Panels* are designed to support and distribute the applied gravity load of the foundation wall to the supporting soil. Allowable loads are controlled by the type of supporting soil. *Composite Footing Panels* design loads must not exceed the allowable gravity loads shown in Table 1.

5.3 Eccentric Loads. Axial compressive loads shall be applied concentrically (centered on the panel) to the top of the product. Loads shall not be applied eccentrically more than 0.5-in.

5.4 Load Application Area. *Composite Footing Panels* are designed to support and distribute the applied gravity load along the length of the panel to the supporting soil. The area in which the axial compressive loads were designed to be applied correlates directly with the *CPS Wall Panel* (ESR-4667) layout, as shown in Figure 2. Standard framed walls with larger bearing areas are also permissible.

5.5 Allowable Soil Bearing Capacity. The allowable soil load-bearing value must be determined by a site-specific geotechnical investigation or evaluation in accordance with of IBC Section 1803 or IRC Section R401.4, as applicable. (IM 049.2 SEP 01 NACU7)

7.2 The panels must be labeled in accordance with the certification report and applicable code requirements. (IM 049.2 SEP 01 NACU9)

6. INSTALLATION

6.1 General. *Composite Footing Panels* shall be manufactured, identified and installed in accordance with this report, the manufacturer's published installation instructions, and the applicable code. In the event of a conflict between the manufacturer's published installation instructions and this report, this report shall govern. (IM 049.2 SEP 01 NACU1)

6.2 Soil Condition. *Composite Footing Panels* shall be installed on undisturbed soil, compacted fill material or controlled low-strength material (CLSM), in accordance with Section 1809 of the IBC. Compacted fill material shall be placed in accordance with Section 1804.6 of the IBC. CLSM shall be placed in accordance with Section 1804.7 of the IBC. (IM 049.2 SEP 01 NACU4)

7. CONDITIONS OF USE

Composite Footing Panels as described in this report comply with the codes listed in Section 2 above, subject to the following conditions:

7.1 The panels are manufactured in the facilities listed in this report. (IM 049.2 SEP 01 NACU8)

This NER report is intended to indicate that ICC NTA, LLC has evaluated the product described and found it to be eligible for labeling. Product not labeled as specified herein is not covered by this report. ICC NTA, LLC makes no warranty, either expressed or implied, regarding the product covered by this report. For more information or questions regarding this report please contact NTA at 1-833-NER-HELP (833-637-4357).



8. EVIDENCE SUBMITTED

ICC NTA, LLC has examined the following evidence to evaluate this product:

8.1 Review of each plant's quality assurance manual and inspection of manufacturer's production facility in accordance with NTA IM 036.

8.2 Plant certification inspection of each manufacturer's production facilities, test procedures, frequency and quality control sampling methods, test equipment and equipment calibration procedures, test records, dates and causes of failures when applicable in accordance with NTA IM 036.

8.3 Qualification test data in accordance with NTA IM 049.2 Standard Evaluation Plan (SEP) 01.

8.4 Periodic quality assurance audits of the production facilities.

8.5 Periodic verification testing in accordance with NTA IM 049.2 SEP 01.

Certification Engineer will add the client's QR Code here before finalizing the report.

Evaluation evidence and data are on file with ICC NTA, LLC. ICC NTA, LLC is accredited by A2LA as follows:

ISO 17020 Inspection Agency

ISO 17025 Testing Laboratory

ISO 17065 Product Certification Agency

The scope of accreditation related to testing, inspection or product certification pertain only to the test methods and/or standard referenced therein. Design parameters and the application of building code requirements, such as special inspection, have not been reviewed by A2LA and are not covered in the accreditation. Product evaluations are performed under the direct supervision of Professional Engineers licensed in all jurisdictions within the United States as required by the building code and state engineering board rules.

9. FINDINGS

All products referenced herein are manufactured under an in-plant Quality Assurance program to ensure that the production quality meets or exceeds the requirements of the codes noted herein and the criteria as established by ICC NTA, LLC. Furthermore, product must comply with the conditions of this report.

This report is subject to annual review.

10. IDENTIFICATION

Each eligible product shall be permanently marked to provide the following information:

10.1 ICC NTA, LLC certification mark, shown below.

10.2 ICC-ES's ESR-XXXX

10.3 In-plant quality assurance stamp

10.4 Identifier for production facility

10.5 Project or batch number

This NER report is intended to indicate that ICC NTA, LLC has evaluated the product described and found it to be eligible for labeling. Product not labeled as specified herein is not covered by this report. ICC NTA, LLC makes no warranty, either expressed or implied, regarding the product covered by this report. For more information or questions regarding this report please contact NTA at 1-833-NER-HELP (833-637-4357).

Table 1: Allowable Loads (Pounds)¹

Property	2000 psf Soil Capacity	4000 psf Soil Capacity
Allowable Load (pounds)	10714 lbs.	21427 lbs.

¹ Tabulated values are 5th percentile with 75% confidence values. The applicability for the design is to be determined by the designer of record.

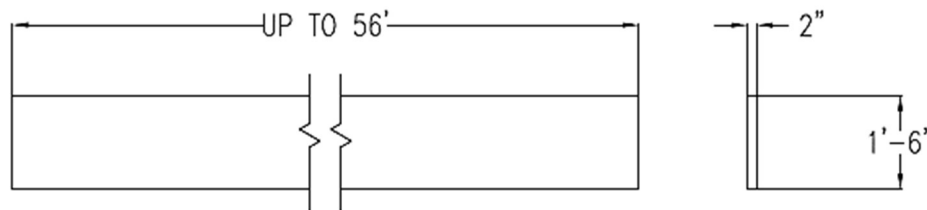


Figure 1: Composite Footing Panel

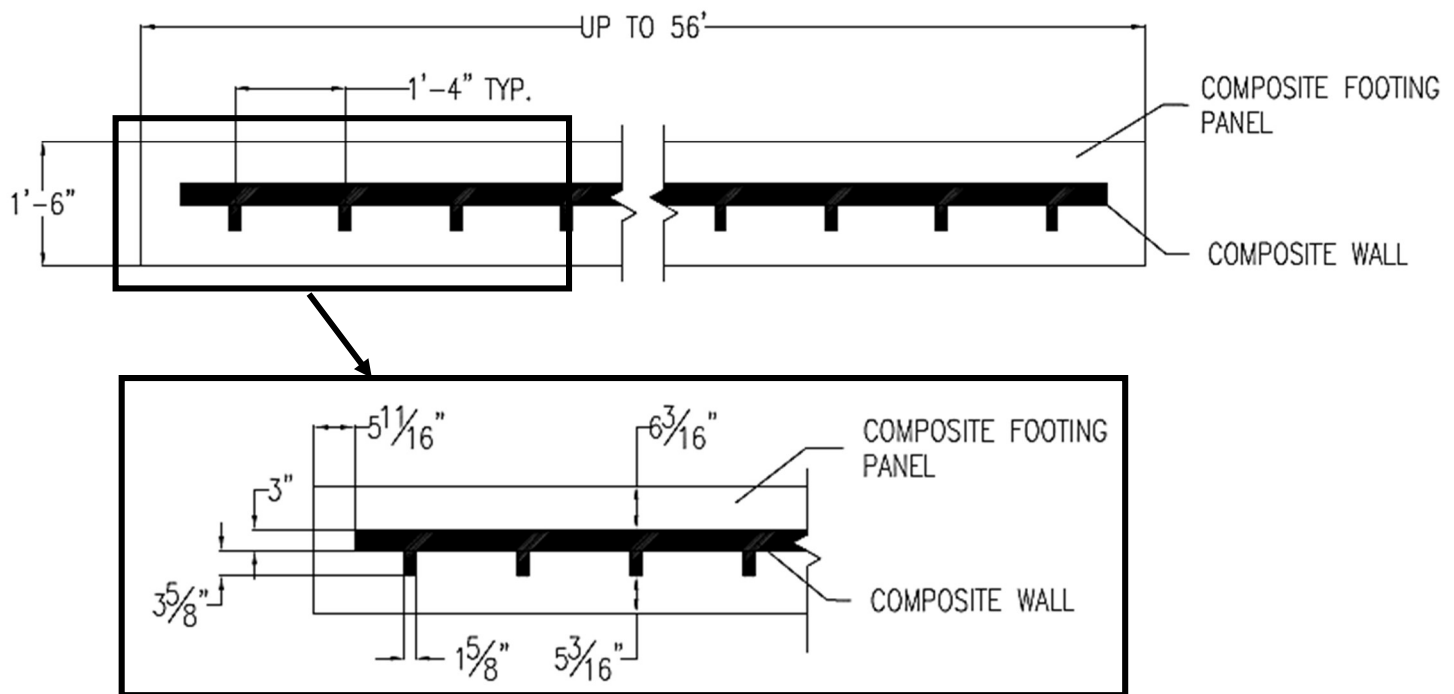


Figure 2: Composite Wall (ESR-4667) Load Area on Composite Footing Panel

This Engineering Evaluation Report is intended to indicate that the Evaluator has evaluated the product(s) herein based on the information available at the time of report issuance. The Evaluator reserves the right to modify, amend or withdrawal this report at any time based on information that becomes available subsequent to the issuance of this report. The Evaluator makes no warranty, either expressed or implied, regarding the product covered by this report.