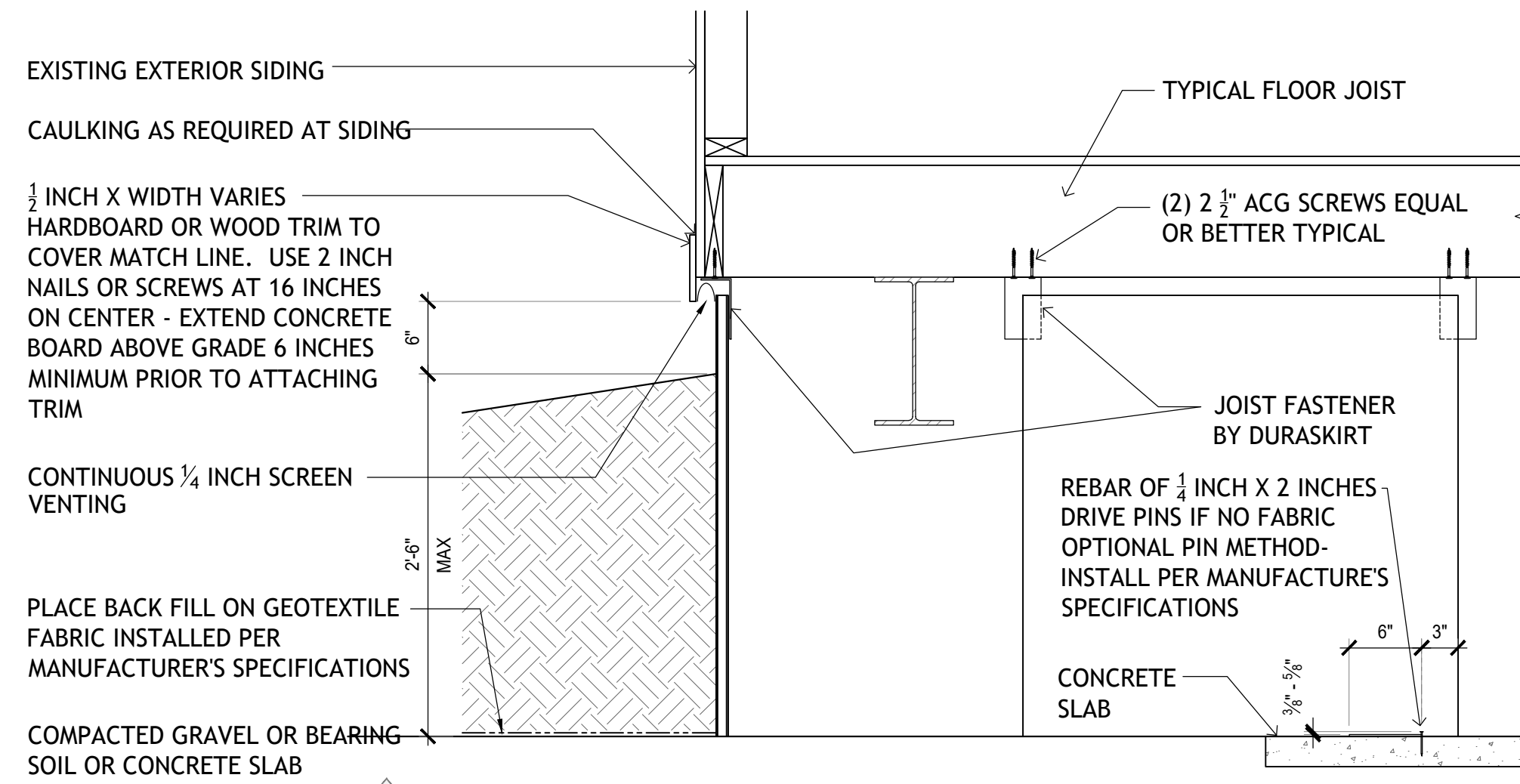
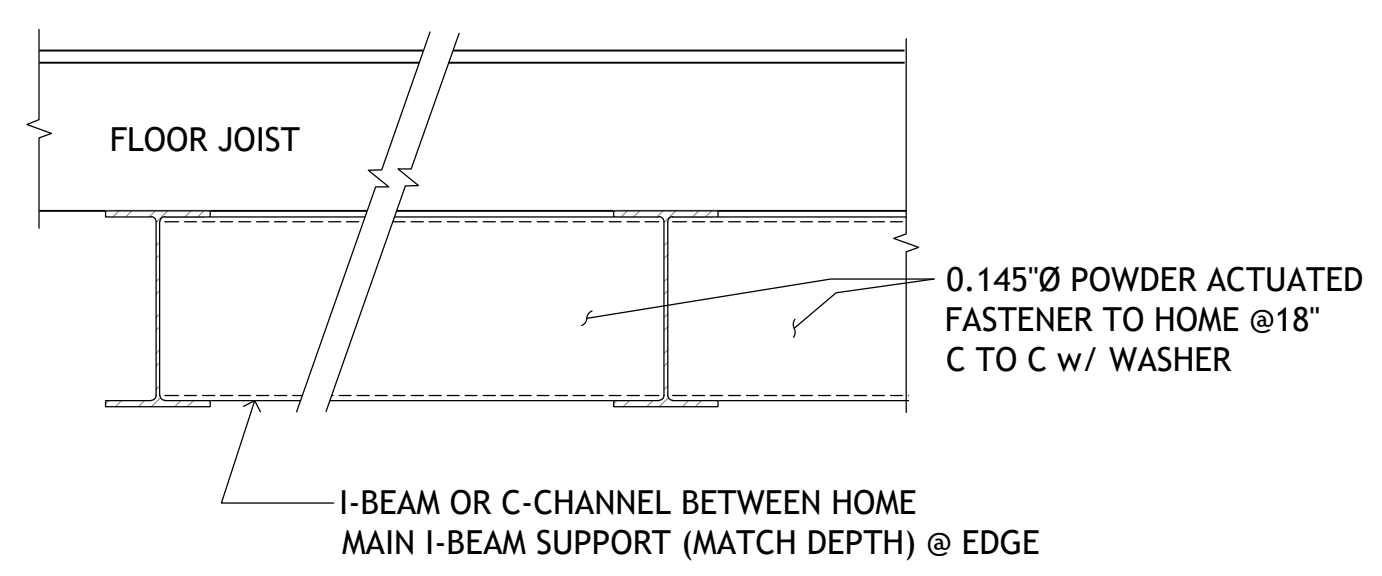


GENERAL NOTES:

- A. ALL WORK SHALL CONFORM TO LOCAL, STATE, AND THE 2018 IRC CODES.
- B. DESIGN LOADS:
 - 1 ROOF LIVE LOAD 20 PSF
 - 2 FLOOR LIVE LOAD 40 PSF
 - 3 WIND SPEED 105 MPH
 - 4 SEISMIC CLASS D
 - 5 SOIL BEARING 1500 PSF
 - 6 FLOOD ZONE DESIGN NOT APPLICABLE IN AREAS DESIGNATED AS FLOOD ZONES
 - 7 FROST DEPTH DESIGN NOT APPLICABLE IN AREAS OF FREEZING CLIMATES
- C. REINFORCING SHALL CONFORM TO ASTM A615, GRADE 60 AND LAP 30 BAR DIAMETERS. ENFORCING SHALL BE CONTINUOUS AROUND ALL CORNERS.
- D. CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS AND DIMENSIONS BEFORE STARTING WORK.
- E. WOOD WITHIN 6 INCHES OF THE GROUND AND SILLS TO CONCRETE OR BLOCK TO BE PRESSURE-TREATED TO FOUNDATION TO FOUNDATION GRADE STANDARD FOR USE IN GROUND CONTACT PRE REQUIREMENTS OF AMERICAN WOOD PRESERVES BUREAU STAND A.W.P.B. - FDN FOUR USE IN GROUND CONTACT.
- F. PROVIDE A 18 INCH X 24 INCH MINIMUM ACCESS HATCH AT ONE LOCATION MINIMUM. AIR VENTS SHALL BE SPACED AROUND THE HOME AT 1 SQUARE FOOT OF VENT PER 150 SQUARE FEET OF FLOOR AREA OR PROVIDE CROSS-VENTILATION WITH CRAWL SPACE EQUAL TO MINIMUM VENTILATION REQUIREMENTS.



B BELOW GRADE SKIRTING DETAIL
SCALE : N.T.S.



C OPTIONAL I-BEAM / CHANNEL @ EDGE
SCALE : N.T.S.

DURASKIRT

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February 26, 2023

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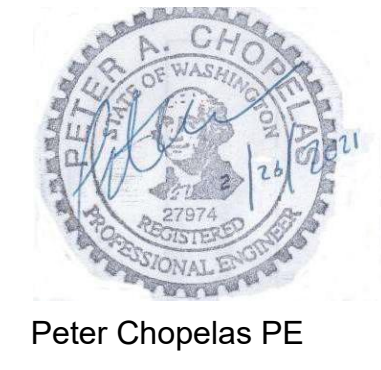
Subject: Duraskirt™ manufactured home perimeter skirt wall system HUD compliance

The subject Duraskirt™ manufactured home perimeter skirt wall system was review for compliance with the current HUD handbook "Permanent Foundation Guild for Manufactured Housing" publication HUD-7584.

It was found that the Duraskirt system meets all the requirements for foundation Type C. These are systems that structurally support and anchor the home at the chassis, per section 100-2. Since perimeter walls may or not be used to structurally support or anchor the home, the Duraskirt™ will meet HUD guidelines. Furthermore, it is composed of rot resistant materials (concrete) and contains screened ventilation openings to meet the other requirements for Exterior perimeter foundations walls.

The design and strength of the Duraskirt™ system has generous safety factors for the applied loads of wind and seismic forces, plus the back fill loads against the skirting if installed per the manufacturer's recommendations.

If you have any questions or need further assistance, please feel free to call. Sincerely,



Peter Chopelas PE

DURASKIRT

Regarding DURASKIRT's Compliance to Regulations Relating to Housing and Urban Development Code 3285.2 Manufacture Installation Instructions:

DURASKIRT's Compliance to Code 3285.2:
DURASKIRT™ concrete skirting is designed to exceed the requirements and intention of CODE 3285.2. Furthermore, DURASKIRT™ concrete skirting has been engineered and tested for backfilling and reviewed by two engineers, one in Washington State and one in Arizona. - SEE PAGES 22, 23 & 24 -

What DURASKIRT™ Is Not:
1) DURASKIRT™ is not a perimeter support foundation.
2) DURASKIRT™ is not a seismic or wind tie-down for the manufactured home.

What DURASKIRT™ Is:
DURASKIRT™ is a concrete, non-flammable, perimeter skirting wall system that is designed for backfilling meeting the requirements of HUD Compliance Code 3285.2 and handbook "Permanent Foundation Guild for Manufactured Housing" publication HUD-7584. Can be backfilled within 6" from the top.

Flood Areas:
Additionally, DURASKIRT™ used in flood plains must use our specially designed Flood-Vents allowing for waterflow through the panels meeting all flood venting requirements. Additionally, DURASKIRT™ panels can be used for a break-away panel design in severe or flash flood areas but will need further site-specific engineering. (We have a typical design available upon request).

Note: When installed to this installation manual, DURASKIRT™ will not damage the home although panels may need to be replaced.

Areas of Frost:
When using DURASKIRT™ above grade make sure that supporting soils are well draining below frost grades. The same must be for slabs where DURASKIRT™ is supported, i.e., below frost depth and or a drainage system that is below frost depth.

Installing DURASKIRT™ as a backfill skirting (pit-set), make sure panels are buried below the frost depth according to your local jurisdictions' requirements. This will prevent frost from heaving the panels and/or frost from breaching the home's perimeter.

DURASKIRT

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July 3, 2024

Richard Imus
DURASKIRT, LLC
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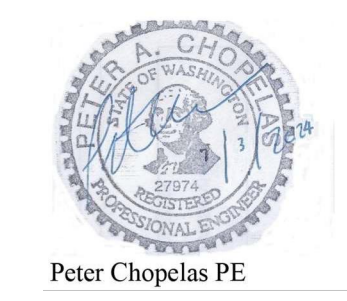
Mailing:
PO BOX 97
MOUNT VERNON, WA 98273

Phone: 360-420-6889

Subject: Duraskirt™ manufactured home perimeter skirt wall system and HUD compliance

The subject Duraskirt™ manufactured home perimeter skirt wall system was review for compliance with the current HUD handbook "Permanent Foundation Guild for Manufactured Housing" publication HUD-7584. And for Lateral strength for back filled installations. It was found that the Duraskirt system meets all of the requirements for foundation Type C. These are systems that structurally support and anchor the home at the chassis, per section 100-2. Since perimeter walls may or not be used to structurally support or anchor the home, the Duraskirt™ will meet HUD guidelines. Furthermore it is composed of rot resistant materials (concrete) and contains screened ventilation openings to meet the other requirements for Exterior perimeter foundations walls.

The design and strength of the Duraskirt™ system has generous safety factors for the applied loads of wind and seismic forces, plus the back fill loads against the skirting if installed per the manufacturer's recommendations. The 30" tall panel was tested for a full backfill height in a jig that simulated normal installation conditions. It was backfilled with compacted medium sand to the top of the 30" tall panel, with no significant deformation of the panel, nor any viable damage or signs of stress or an overloaded condition. The sand has measured dry weight at 110 PCF, and an internal angle of friction of 30 deg. This corresponds to an active lateral pressure coefficient of 0.33, or an equivalent fluid pressure of 36.3 PCF. These values were used to analyze the panel for lateral moment cap city. The panels are reinforced with a 1" x 1" grid of 16 gauge, 60K psi wire, placed off-center to the panel thickness with plastic standouts when the forms are filled with 4000 PSI concrete mix. Analysis indicates this configuration has a factored moment capacity of 8857 in-lbs. The installed loading requires a maximum lateral bending moment of 744 in-lbs. Therefore it has a calculated factor of safety of 11.9. This is about eight times the min required. These panels are very durable, and should not ever become overloaded when installed and used according to the manufacturer's recommendations. If you have any questions or are in need of further assistance, please feel free to call.



Peter Chopelas PE

BB/CA ENGINEERING
HOME & BUILDING INSPECTION SPECIALISTS

August 7, 2019

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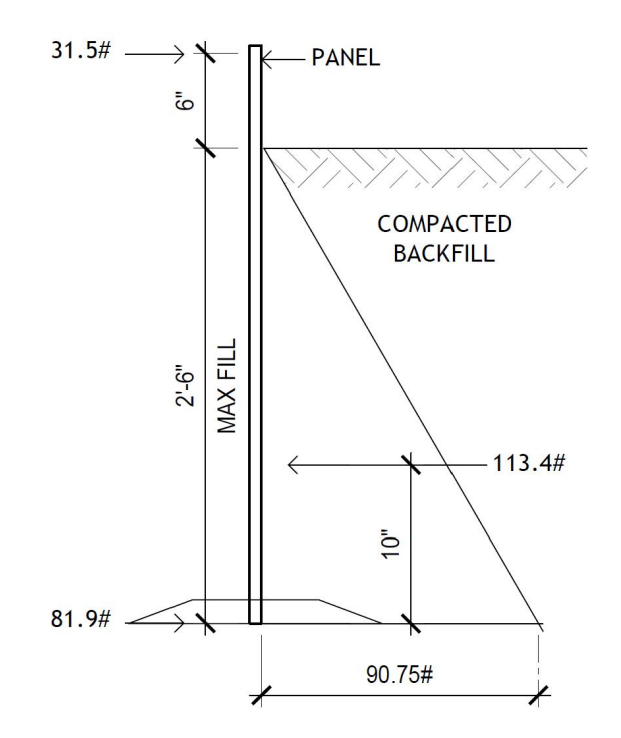
Subject: Duraskirt™ Panel Calculations

LATERAL LOAD CALCULATION for DURASKIRT PANEL
Panel Geometry: 3/4" Thick x 36" H x Various W
Panel Reinforcing Wire: 1"x1"x36" 16-Ga (0.0508" Diameter) Wire Mesh @ d=1/2"
As = π(0.0508) 4 = 0.002027 in2/in of mesh
ρ = 12" x 0.002027 in2/in = 0.0243 in2/ft

Soil Properties
Medium Sand Deck Fill Test
Measured Density: 110 pcf
Friction Angle: φ = 30°, Active Lateral Coefficient => 0.33
Equivalent Fluid Pressure => 110psf(0.33) = 36.3 pcf
Assuming Maximum Backfill on Panel at 30".
P = 2.5'(36.3pcf) = 90.75#
Mmax = 43 ft-# = 516 in-#

Concrete Panel Capacity
F'c = 6000 psi, Fy = 60 ksi
Mu = 1.7Mmax = 1.7(516 in-#) = 877 in-#
Mn = φpbd2fy[1-0.59ρ(fy/F'c)]
Mn = 0.9(0.0243)(12)(0.50)(60,000)[1-0.59(0.0243)(60/6)]
Mn = 3372 in-# > Mu

Safety Factor = 3372/877 = 3.8

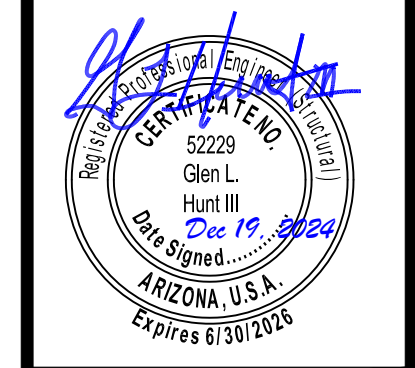


ENGINEER:
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OWNER:
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Mount Vernon, WA 98273

REVISIONS

NO.	DESCRIPTION



PROJECT:
TYPICAL MANUFACTURED HOME SKIRTING PLAN - BELOW GRADE
FACTORY MANUFACTURED HOUSING

DATE: 12-19-24
SCALE: AS NOTED
DRAWN BY: CK
REVIEWED BY: GH
PROJECT NUMBER: ISE: 19765

SHEET:
1 OF 1