

Wind Load Analysis Requirements
(Designed in accordance with the Florida Building Code 8th Edition, 2023)

Prepared for:
625 Rosewood Circle

Located in:
Lake City, Columbia County, FL

Accompanies Plans Prepared by:
Designer Services
Lauri B. Ketring
833 NW Banta Acres Rd.
Mayo, FL 32066
Sheets (A-1, A-2, A-3, E-1, S-1 and S-2)

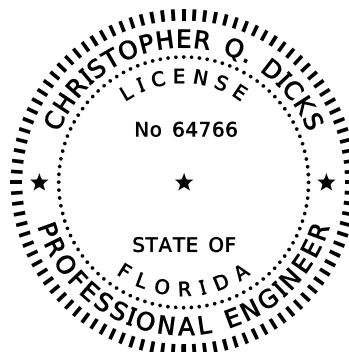
Prepared by:
Christopher Q. Dicks, P.E. # 64766
4037 SE CR 252, Lake City, FL 32025
(386) 365-1223



THIS ITEM HAS BEEN DIGITALLY
SIGNED AND SEALED BY

Christopher Q Dicks

Digitally signed by Christopher Q Dicks
DN: CN=Christopher Q Dicks,
dnQualifier=A01410D0000018D9DEA75C20000F146,
O=Florida, C=US
Reason: I am the author of this document
Date: 2025.01.27 18:46:06-05'00'



ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT
ARE NOT CONSIDERED SIGNED AND
SEALED AND THE SIGNATURE MUST BE
VERIFIED ON ANY ELECTRONIC COPIES.

625 ROSEWOOD CIRCLE
COLUMBIA COUNTY, FLORIDA

DETAIL PREPARED BY:
CHRISTOPHER Q. DICKS, P.E. 64766
4037 SE CR 252, LAKE CITY, FL 32025

SHEET
1 of 5

Description of Residence:

Structure: (width by depth)

The structure is 52' x 32' overall, with an attached garage 22' x 20'-11", a 9' x 8' front porch inset 4' and a 20' x 10' rear porch. The walls are 9' in height. The exterior is fiber cement board with a hip roof (5:12, shingles). The two porches and garage are both gables with the valleys tying back to the main roof. The front of the house is northwestern facing towards SE Rosewood Circle.

Walls:

9-foot walls, 2x6 SPF studs at 16" o.c. with 7/16" OSB sheathing, house wrap and fiber cement board lap siding.

Roof Structure:

Pre-engineered roof trusses at 2' o.c. and 15/32" OSB or CDX plywood sheathing

Roof Type:

Hip with small gables at the front porch, garage and rear porch of home (analyzed for 2' eaves and porches)

Foundation:

Stem-wall with slab construction. (see attached details)

Windload Data and Exposure:

Basic Wind Speed = 120 mph

Importance Factor = 1.0

Exposure category = B

Height and Exposure Adjustment Coefficient = 1.0

Residential Occupancy = Group R3

Mean roof height = 13'

Roof Cross Slope = 5:12

Eave Overhang = (Analyzed for 2' eaves and porch areas)

Wall Height = 9' above slab

Shear Wall Locations = exterior walls (all walls 3' in length or greater)

Component and Cladding Design Pressures =

Roof Zone 1 = 10.00, -17.02

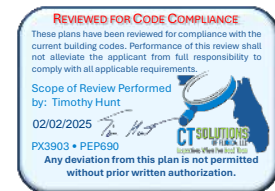
Roof Zone 2 = 10.00, -23.48

Roof Zone 3 = 10.00, -23.48

Wall Zone 4 = 12.71, -13.79

Wall Zone 5 = 12.71, -17.02

Garage Door 16x7 = 13.1, -14.6



Nailing Pattern Requirements:

Wall sheathing:

Shall be 7/16" Oriented Strand Board (OSB) minimum nailed with 8d common nails 6" o.c. around edges (including around doors and windows) and 6" o.c. interior. Install with long dimension vertical and full depth blocking shall be required at horizontal joints in sheathing.

Roof sheathing:

Shall be 15/32" Oriented Strand Board (OSB) or CDX plywood sheathing nailed with 8d ring-shank nails 4" o.c. around edges and 6" o.c. interior, including overhang areas.

Top wall plate:

Nail with 2-16d common nail 12" o.c. (average)

625 ROSEWOOD CIRCLE
COLUMBIA COUNTY, FLORIDA

DETAIL PREPARED BY:
CHRISTOPHER Q. DICKS, P.E. 64766
4037 SE CR 252, LAKE CITY, FL 32025

SHEET
2 of 5

Strapping and Anchor Requirements:

Truss to exterior wall plate, interior load-bearing plate, and porch beam locations:

Install Simpson H10 hurricane anchor, or SDWC 15600 truss screw of equal capacity, at each location.

For Double ply trusses install Simpson H10-2 at each location.

Wall strap tie requirements:

Install Simpson SP6, at top and bottom of wall, on each side of doors and windows 4' or less in width. Install two SP6s, at top and bottom of wall, for windows >4' – 6'. All other wall locations install SP6, top and bottom of wall, 4' on center.

Porch columns (6x6 PT):

Front Porch: install Simpson ABU66 anchor at the column base to concrete slab connection and two ½" thru bolts with washers at the column to beam connection.

Rear Porch: see rear porch foundation detail for column base and install Simpson AC6 (ACE6 at end posts) at the column to beam connection.

Porch headers to Home connection:

Install one Simpson HUC612 at beam to home wall connection.

Porch Ceilings:

Install 1x4 lathes 16" o.c. and nail with 2-8d nails at each truss and install solid metal or solid vinyl soffit material.

Foundation Requirements:

Stemwall/Footer:

Minimum size of footer shall be 10" x 20" wide with 2-#5 rebar continuous and 1-#5 vertical rebar 72" on center. All cells shall be filled with concrete. 5/8" x 10" anchor bolts with 2" square plate washer shall be installed 32" on center and 6" from corners each way and at each side of door openings. (3000 psi concrete min.) (Note: foundation designed using an allowable bearing pressured of 1000psi)

Header Requirements:

Windows & Doors (<=4'):

Header shall be 2- 2x10s No. 2 SYP (min.) box header.

Windows & Doors (>4'):

Header shall be 2- 2x12s No. 2 SYP box header.

Porches Beams:

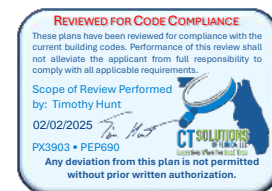
Front Porch: minimum beam shall be 2 – No. 2 SYP 2x12s box header.

Rear Porch: minimum beam shall be 3 - #2 SYP 2x12s with (7/16 or 15/32") CDX plywood/OSB between. Nail beams together with 4-12d common nails 10" O.C.

Garage Header:

Minimum header shall be 2 – 1.75" x 11.875" lvl (2.0 X 10^6 E min.) box header.

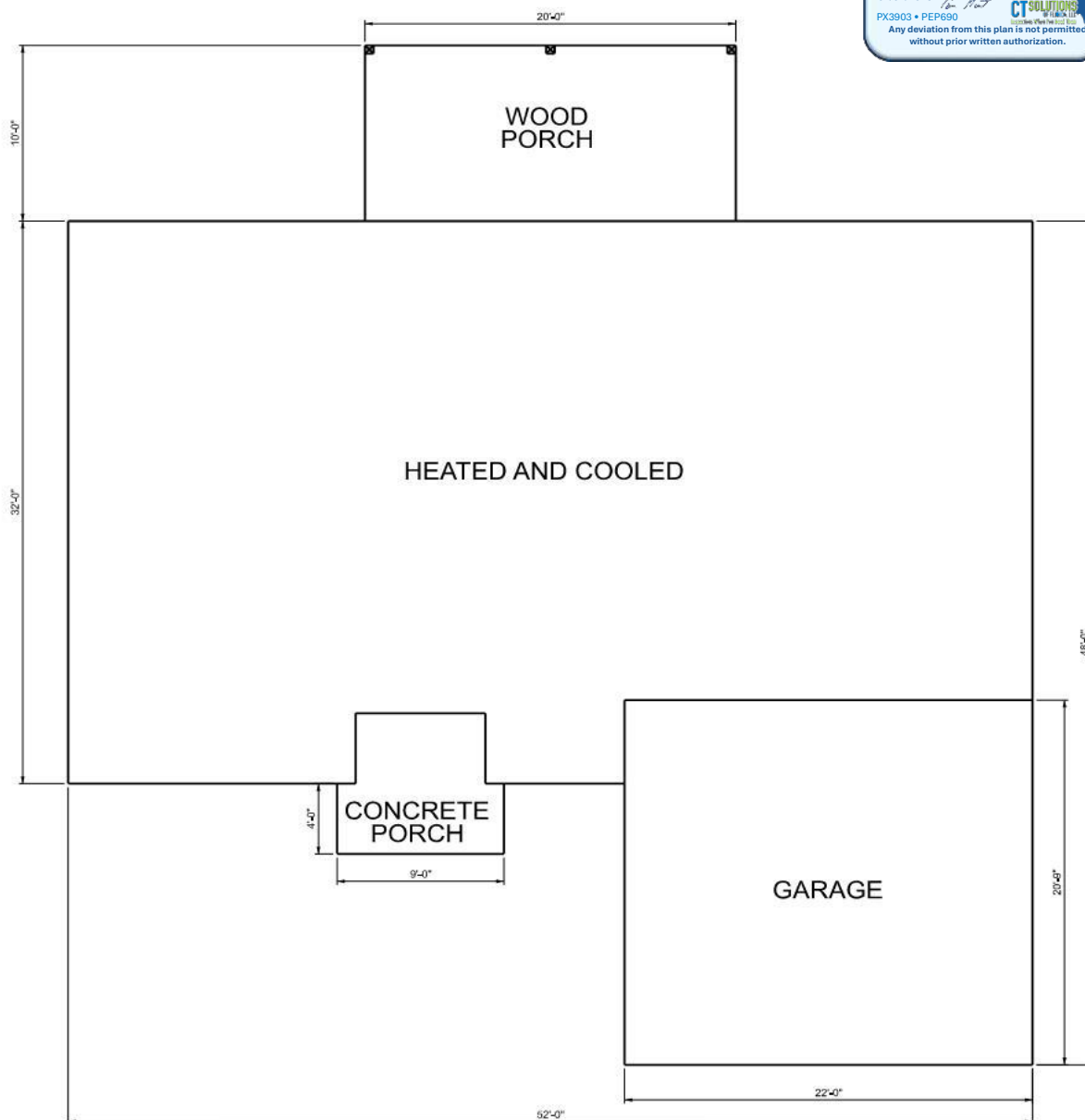
Note: Equivalent capacity anchors may be substituted, installed in accordance with the manufacturers requirements.



625 ROSEWOOD CIRCLE
COLUMBIA COUNTY, FLORIDA

DETAIL PREPARED BY:
CHRISTOPHER Q. DICKS, P.E. 64766
4037 SE CR 252, LAKE CITY, FL 32025

SHEET
3 of 5

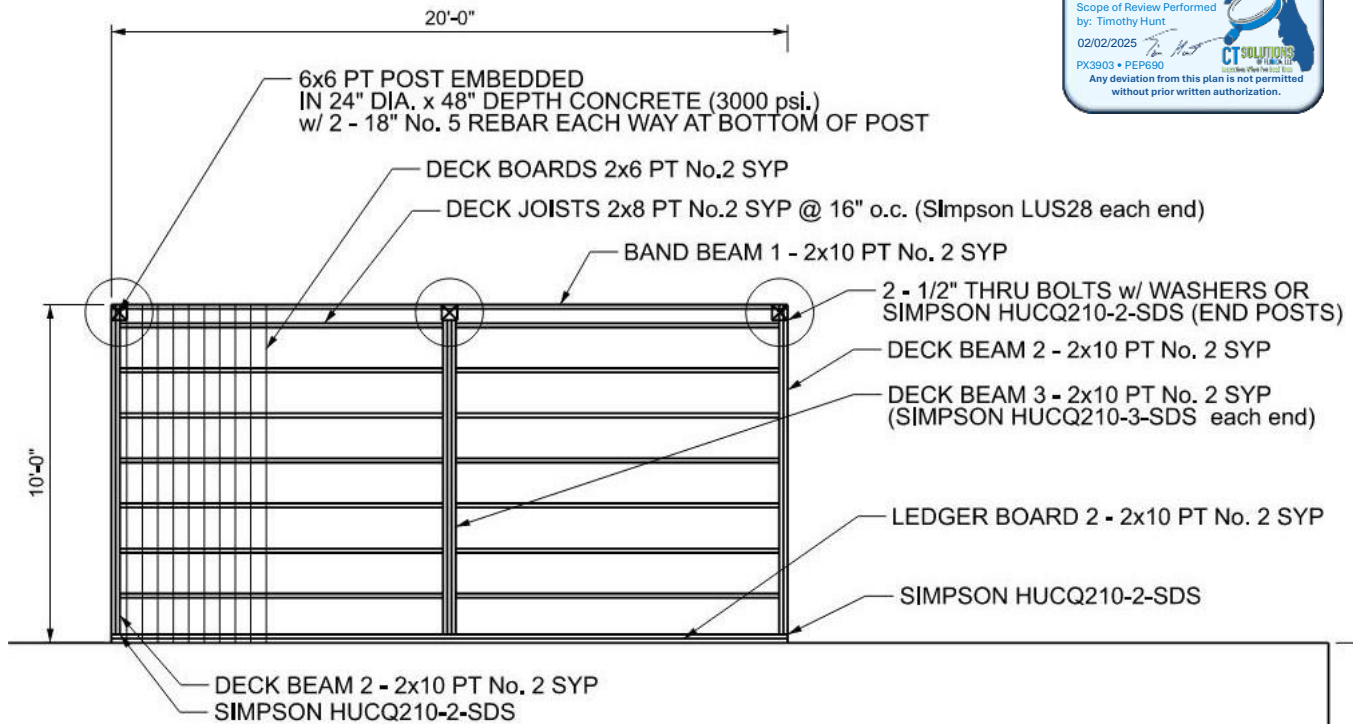


PROPOSED RESIDENCE (N.T.S.)

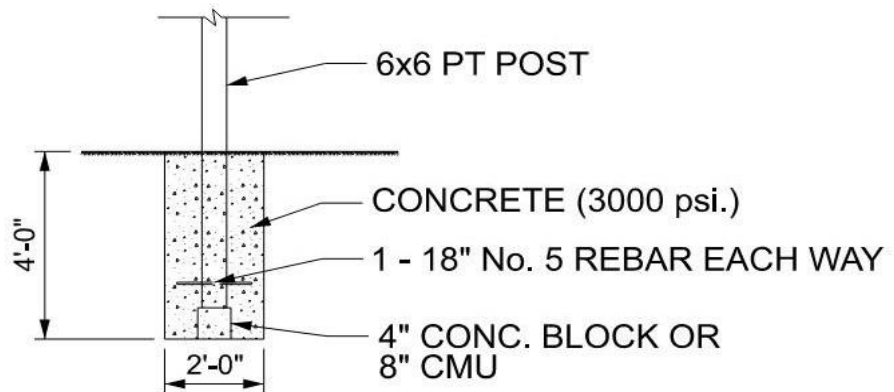
625 ROSEWOOD CIRCLE
COLUMBIA COUNTY, FLORIDA

DETAIL PREPARED BY:
CHRISTOPHER Q. DICKS, P.E. 64766
4037 SE CR 252, LAKE CITY, FL 32025

SHEET
4 of 5



REAR PORCH DECK DETAILS (N.T.S.)



REAR PORCH POST FOUNDATION DETAIL (N.T.S.)

625 ROSEWOOD CIRCLE
COLUMBIA COUNTY, FLORIDA

DETAIL PREPARED BY:
CHRISTOPHER Q. DICKS, P.E. 64766
4037 SE CR 252, LAKE CITY, FL 32025

SHEET
5 of 5