

LETTER OF CERTIFICATION

11-21-2023

Barefoot Building Company 3636 NC Hwy 27 E Coats, NC 27521

JOB NUMBER: 23-11292 302 E Stewart Street Coats NC 27521 69'-2" X 99'-2" X16'-0"X17'-6"

To Whom It May Concern:

This letter is to certify that the building designed by Ascent Buildings LLC is in accordance with order documents, shown on the attached Design Criteria sheet.

Items added to building related to use and occupancy, such as sprinklers, are not addressed in these documents.

When properly erected on an adequate foundation, in accordance with erection dwgs as supplied and components furnished, will meet the attached loading requirements.

Field modifications or design of materials not supplied by Ascent Buildings LLC are not covered by this certification.

Included with this certification is design criteria and serviceability limits.

The engineer whose seal appears on this page is an employee of Ascent Buildings LLC and is not the engineer of record for the project.

Sincerely,



Ross Richards P.E. Ascent Buildings



Building Co	de NCBC 18	(IBC 15)		
Building Ri	sk Category II Nor	rmal		
Roof Dead Lo	bad			
	Superimposed	2.50 psf		
	Collateral	5.00 psf		
Roof Live Load		20.0 psf	Reduction allowe	ed
Rain Intensity		7.06 in/hr		
Snow				
	Ground Snow Load (Pg)	15.0 psf		
	Snow Load Importance Factor (I)	1		
	Flat Roof Snow Load (Pf)	10.5 psf		
	Snow Exposure Factor (Ce)	1		
	Thermal Factor (Ct)	1		
Wind				
	Ultimate Wind Speed (Vult)	118 mph		
	Wind Exposure Category	В		
	Internal Pressure Coef (GCpi)	0.18,-0.18		
		,		
Seismic				
	Seismic Importance Factor (Ie)	.1		
	Seismic Design Category	В		
	Soil Site Class	D		
	Ss	0.1750 g	Sds 0.1867	g
	S1	0.0830 g	Sd1 0.1328	g
	Analysis Procedure	Equivalent	Lateral Force	
	Direction		Longitudinal	Transverse
	Response Modification Coefficent	(R)	3	3
	Seismic Response Coefficient (Cs	)	0.0623	0.0623
	Design Base Shear in kips (V)		14.17	12.26



The material supplied by the manufacturer has been designed with the following minimum deflection criteria. The actual deflection may be less depending on actual load and actual member length.

## BUILDING DEFLECTION LIMITS..... BLDG-A

	Rafters	Purlins	P	Panels	
- -		100	-		<u> </u>
上/		180	180		60
L/		180	150		60
_	Sidesway	Portal	Frame Sid	lesway	
H/		120			
H/		180			
H/		50		50	
H/		N/A			
H/		N/A	1	20	
-	Limit				
L/		600			
L/		600			
L/		600			
	L/ L/ H/ H/ H/ H/ L/ L/ L/	Rafters  L/ L/ Sidesway  H/ H/ H/ H/ H/ H/ Limit  L/ L/	Rafters   Purlins     L/   180     L/   180     L/   180     L/   180     M/   Portal     H/   120     H/   180     H/   50     H/   N/A     H/   N/A     Limit	Rafters Purlins H   L/ 180 180   L/ 180 150   Sidesway Portal Frame Side   H/ 120   H/ 180   H/ 50   H/ N/A   H/ N/A   Limit 1   L/ 600   L/ 600	Rafters     Purlins     Panels       L/     180     180       L/     180     150       L/     180     150       Sidesway     Portal Frame Sidesway       H/     120       H/     180       H/     50       H/     50       H/     50       H/     N/A       H/     N/A       Limit     120       Limit     120       L//     600       L/     600       L/     600

The Service Seismic limit as shown here is at service level loads.