# **GENERAL NOTES**

## **DESIGN LOADS**

**BUILDING CODE** IBC 2015 LIVE LOADS 5 PSF

SNOW LOAD 5 PSF STEEL FRAME WITH FABRIC ATTACHED 10 PSF STEEL FRAME WITH FABRIC REMOVED

WIND LOADS 115 MPH<sup>1</sup>, STEEL FRAME WITH FABRIC ATTACHED 119 MPH<sup>2</sup>, STEEL FRAME WITH FABRIC REMOVED 3-Sec. Gust, RISK CATEGORY II & EXPOSURE C

1.- 115 MPH ACCORDING THE ULTIMATE WIND SPEED MAPS OF ASCE 7-10 IS EQUIVALENT TO THE NOMINAL WIND SPEED OF 90 MPH ACCORDING ASCE 7-05

AND IBC 2015 EQ 16-33. 2.-119 MPH ACCORDING THE ULTIMATE WIND SPEED MAPS OF ASCE 7-10 IS EQUIVALENT TO THE NOMINAL WIND SPEED OF 92 MPH ACCORDING ASCE 7-05

#### STRUCTURAL STEEL

AND IBC 2015 EQ 16-33.

1.- ALL STRUCTURAL SHAPES SHALL BE COLD FORMED HSS ASTM A500 GRADE C, UNLESS OTHERWISE NOTED, TYPICAL MECHANICAL PROPERTIES FOR HSS PRODUCTS:

SQUARE AND RECTANGULAR 50,000 PSI YIELD / 62,000 PSI TENSILE **ROUND PIPE** 46,000 PSI YIELD / 62,000 PSI TENSILE

2.- ALL GALVANIZED STEEL TUBE PRODUCTS ARE MANUFACTURED PER ASTM A500, TYPICAL MECHANICAL PROPERTIES ACHIEVED FOR GALVANIZED TUBE PRODUCTS: **ROUND TUBE** 45,000 PSI YIELD / 48,000 PSI TENSILE

3.- ALL PLATES SHALL COMPLY WITH ASTM A572 GRADE 50.

4.- ALL STEEL TUBING SHALL BE TRIPLE COATED FOR RUST PROTECTION USING THE IN-LINE ELECTROPLATING COAT PROCESS. TUBING SHALL BE INTERNALLY COATED WITH ZINC AND ORGANIC COATINGS TO PREVENT CORROSION AS MANUFACTURED BY ALLIED TUBE & CONDUIT.

5.- STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH A.I.S.C. SPECIFICATIONS.

6.- ALL SHOP WELDS SHALL BE EXECUTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN WELDING SOCIETY (AWS) D1.1 SPECIFICATIONS. ALL WELDS SHALL BE CONTINUOUS WHERE LENGTH IS NOT GIVEN, UNLESS OTHERWISE SHOWN OR NOTED ON DRAWINGS. ALL WELDS SHALL DEVELOP THE FULL STRENGTH OF THE WEAKER MEMBER. ALL WELDS SHALL BE MADE USING E70XX .045 WIRE.

7.- SHOP CONNECTIONS SHALL BE WELDED UNLESS NOTED OTHERWISE. FIELD CONNECTIONS SHALL BE AS INDICATED ON THE DRAWINGS (IF REQUIRED). ALL FILLET WELDS SHALL BE A MINIMUM OF 3/16" UNLESS OTHERWISE NOTED. FIELD WELDS SHALL NOT BE ALLOWED.

8.- ALL HIGH STRENGTH BOLTS SHALL COMPLY WITH ASTM A325 TYPE 1 OR A490 TYPE 1. ALL NUTS SHALL COMPLY WITH ASTM A563DH, AND WASHERS SHALL COMPLY WITH ASTM F436.

9.- ALL HIGH STRENGTH BOLTS SHALL BE TIGHTENED TO A SNUG TIGHT CONDITION.

10.- ALL STAINLESS STEEL BOLTS / STUDS SHALL COMPLY WITH ASTM F-593, ALLOY GROUP 1 OR 2 ALL NUTS SHALL COMPLY WITH ASTM F-594 ALLOY GROUP 1 OR 2.

11.- ALL STRUCTURAL STEEL SHALL BE PAINTED WITH ONE SHOP COAT (2.5 TO 3.5 MILS THICK MIN). THIS COAT IS A WEATHER RESISTANT POWDER COATING BASED ON POLYESTER TGIC (MANUFACTURED BY SHERWIN WILLIAMS OR TIGER DRYLAC). TO ACHIEVE OPTIMUM ADHESION, IT IS RECOMMENDED THAT THE PROPER TREATMENT AND DRYING TAKE PLACE BEFORE COATING. POLYESTER POWDER (TGIC) SPECIFICATIONS SHALL BE AS FOLLOWS:

- PENCIL HARDNESS (ASTM D-3363)

- HUMIDITY (ASTM D-2247)

- SOLVENT RESISTANCE (PCI METHOD) - 50 DBL RUBS SL. SOFTNES

## FABRIC SPECIFICATION

1.- FABRIC SHALL BE A HIGH DENSITY POLYETHYLENE WITH ULTRA VIOLET ADDITIVES, WITH MONOFILAMENT AND TAPE CONSTRUCTION GIVING A STABLE

2.- FABRIC SPECIFICATIONS: SOLID COLORS -TEAR STRENGTH - BURST STRENGTH 37.7098 PSIA 33.0686 PSIA

- FADING MINIMUM FADING AFTER 5 YEARS - LIFE EXPECTANCY A MINIMUM OF 8 YEARS CONTINUOUS

EXPOSURE TO THE SUN

4.- THREAD-PTFE (TEFLON) USED MEET THE FOLLOWING SPECIFICATIONS: HIGH STRENGTH, LOW SHRINKAGE, WIDE TEMPERATURE RANGE, FLEX & ABRASION RESISTANT AND UV RADIATION IMMUNITY. LOCKSTITCH - 1200 DENIER.

1.- WIRE ROPE CABLE SHALL BE 7x19 STRAND CORE GALVANIZED WIRE ROPE WITH A BREAKING STRENGTH VALUE OF 7,000 LBS (1/4" DIAMETER).

2.- CABLES SHALL BE FED THROUGH THE FABRIC SLEEVES AROUND THE PERIMETER OF THE CANOPY AND TENSIONED UNTIL THE FABRIC PANELS (DESIGNED PURPOSELY UNDERSIZED) REACH A TAUNT APPEARANCE. ANY LONG TERM CABLE SAG SHALL BE MINIMIZED DURING THE MAINTENANCE

NOTICE TO CONTRACTOR construction must comply with current NC Building Codes and is subject to field inspection and verification.

Limited building only review Permit holder responsible for full compliance with the code

10/06/2020







CODE ANALYSIS

CONSTRUCTION TYPE

V-B

BUILDING

SHADE STRUCTURE

12'-00" x 12'-00"

OCCUPANCY

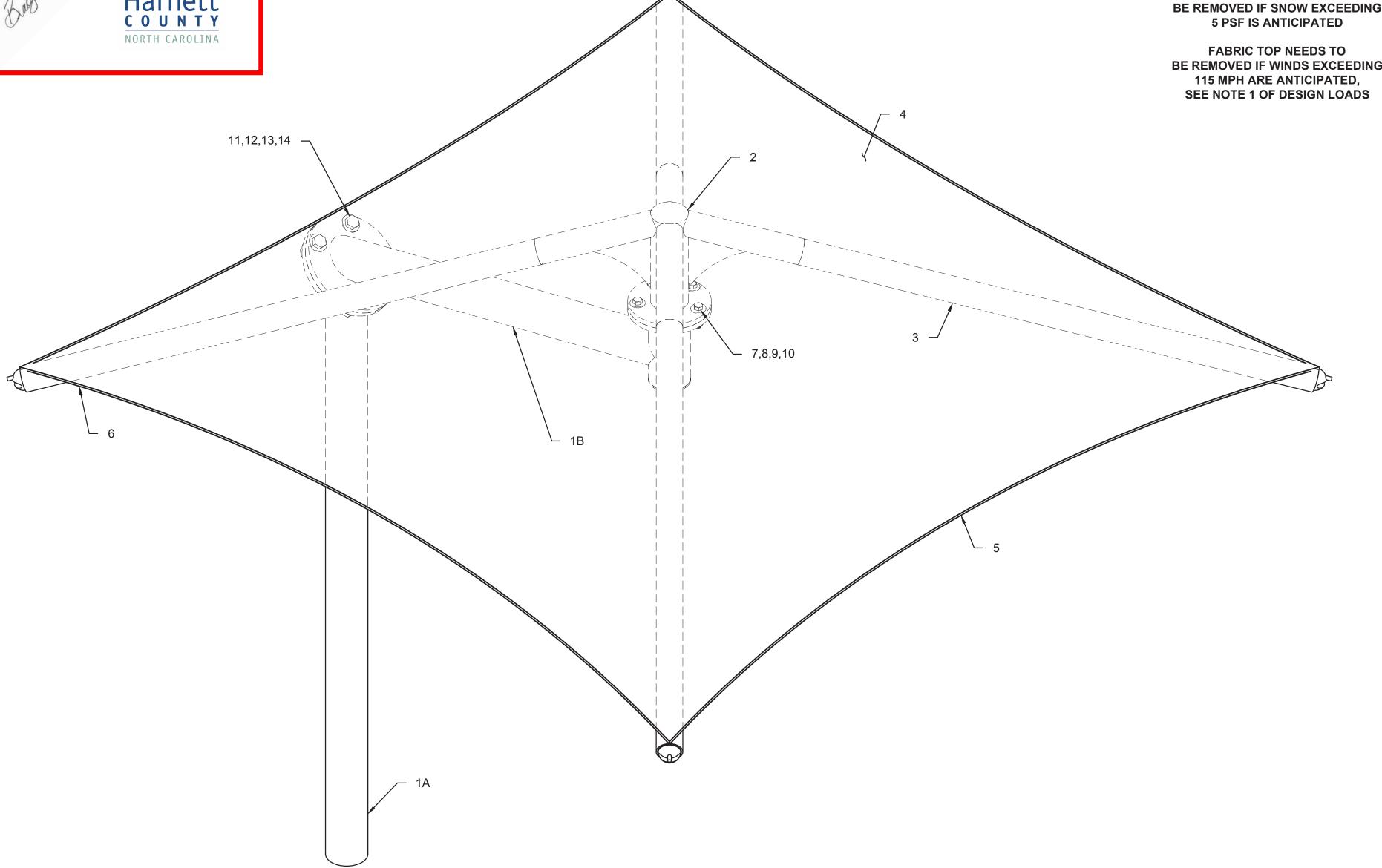
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AREA (SQF)

144

OCCUPANT LOAD

N/A



**ISOMETRIC VIEW** 

				$m_{ m H}$			
	LIST OF MATERIALS						
ГЕМ	QTY.	DESCRIPTION	MATERIAL / DWG.	SMI PART No.			
1A	1	COLUMN	PIPE Ø5.00 SCH 40 (5.563 x 0.258)	SPUCOL-CANT-5563-136			
1B	1	COLUMN ARM	PIPE Ø5.00 SCH 40 (5.563 x 0.258)	SPARM-CANT-5563-76			
2	1	CROWN	RD TUBING Ø5.0 7GA	SPPCP-350-F3-1			
3	4	RAFTER	RD TUBING Ø3.5 8GA	SPR-350-94			
4	1	FABRIC 12' X 12'	HDPE MESH	AREA: 144 SQF, WEIGHT: 6.2 LBS			
5	1	65 FT OF 1/4" STEEL CABLE	GALVANIZED	307604			
6	4	Ø1/4" CABLE CLAMP	GALVANIZED	307633			

4	I	FADRIC 12 A 12	UDAE MEQU	ANLA. 144 SQI, WLIGITI. 0.2
5	1	65 FT OF 1/4" STEEL CABLE	GALVANIZED	307604
6	4	Ø1/4" CABLE CLAMP	GALVANIZED	307633
7	5	Ø3/4"-10NC x 3" HEX HEAD BOLT	ASTM A-325 GALVANIZED	308073
8	5	Ø3/4"-10NC NUT	ASTM A-563 GALVANIZED	307687
9	5	Ø3/4" SPLIT LOCK WASHER	ASTM F-436 GALVANIZED	307832
10	10	Ø3/4" FLAT WASHER	ASTM F-436 GALVANIZED	307624
11	4	Ø1"-8NC x 4" HEX HEAD BOLT	ASTM A325 GALVANIZED	307722
12	4	Ø1"-8NC NUT	ASTM A563 GALVANIZED	307968
13	4	Ø1" SPLIT LOCK WASHER	ASTM F436 GALVANIZED	307620
14	8	Ø1" FLAT WASHER	ASTM F436 GALVANIZED	307619

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF USA SHADE AND FABRIC STRUCTURES AND SHALL NOT BE REPRODUCED WITHOUT THEIR WRITTEN PERMISSION.

**NOTICE** 

**FABRIC TOP NEEDS TO** 



**CORPORATE HEADQUARTERS** 2580 ESTERS BLVD, SUITE 100 DFW AIRPORT, TX 75247 800-966-5005

#### **CERTIFICATIONS:**

IAS CERTIFICATION No: FA-428 CLARK COUNTY MANUFACTURER CERTIFICATION NUMBER (NEVADA): 355

#### CUSTOMER:

### CAROLINA **RECREATION**

PROJECT NAME:

## **ERWIN SPLASHPAD**

LOCATION:

**ERWIN** 

PROJECT NUMBER.

**STRUCTURE TYPE:** 

## SINGLE POST PYR CANTI **PRODUCT #124.2**

SIZE:

12' x 12' x 8'e **SCALE: AS NOTED** 

DRAWING SIZE:

AL	ENG
AL	хнэ
MMK	DRW
09/29/20 MMK AL	DATE DRW CHK ENG
RELEASE FOR CONSTRUCTION	DESCRIPTION

09/29/20 Eng. By: AL Design By: MMK 09/29/20 09/29/20 Approved By: AL **DRAWING DESCRIPTION:** 

**NOTES / LOM** 

75615-1.0

1000

NC

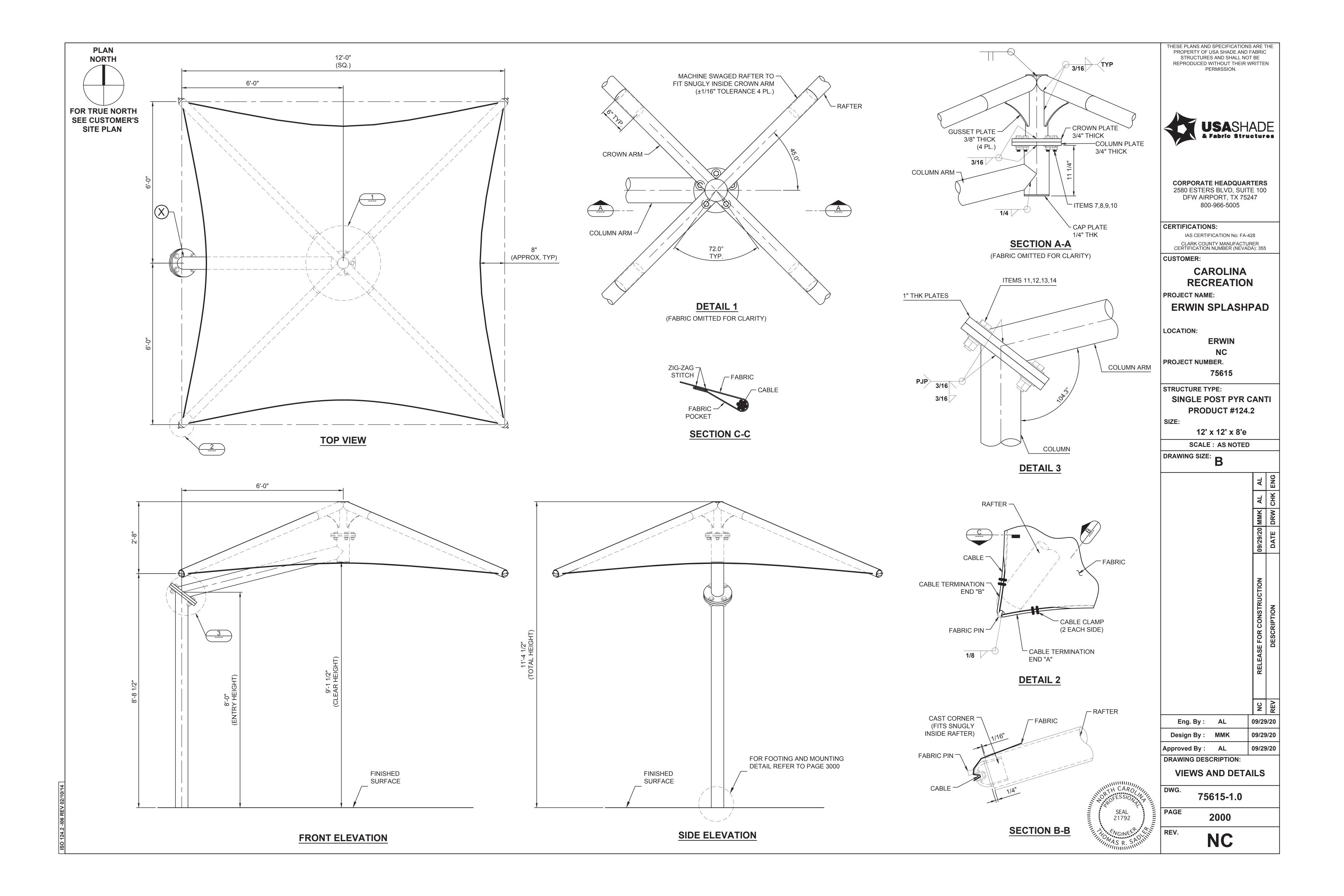


3.- FIRE TEST ON FABRIC: NFPA 701 TEST 2 AND ASTM E 84

CHAINSTITCH THREAD - 2400 DENIER.

#### AIRCRAFT CABLE

RE-TIGHTENING VISITS AS REQUIRED.



## REINFORCED CONCRETE NOTES

- 1.- CONCRETE WORK SHALL BE EXECUTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN CONCRETE INSTITUTE SPECIFICATION FOR STRUCTURAL CONCRETE ACI 301 AND BUILDING CODE ACI 318.
- CONCRETE SPECIFICATIONS, SHALL BE AS FOLLOWS:
  - 28 DAY STRENGTH: 2500 PSI
  - SLUMP: 3-5
  - PORTLAND CEMENT SHALL CONFORM TO C-150
  - AGGREGATE SHALL CONFORM TO ASTM C-33

2.- ALL REINFORCEMENT STEEL SHALL CONFORM TO ASTM A-615 GRADE 60; AND SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH THE LATEST ACI SPECIFICATION FOR STRUCTURAL CONCRETE ACI 301, ACI DETAILING MANUAL AND CRSI MANUAL OF STANDARD PRACTICE.

3.- ALL ANCHOR BOLTS SET IN NEW CONCRETE (WHEN APPLICABLE) SHALL COMPLY WITH ASTM F-1554 GRADE 55 (GALVANIZED).

4.- ALL NON-SHRINK GROUT SHALL HAVE A MINIMUM 28 DAYS COMPRESSIVE STRENGTH OF 5000 PSI, AND SHALL COMPLY THE REQUIREMENTS OF ASTM C109, ASTM C939, ASTM C1090, ASTM C1107, WHEN APPLICABLE.

5.- SOIL PARAMETERS FOR FOOTING ANALYSIS; TABLE 1806.2, CLASS: 5



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#### **CERTIFICATIONS:**

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# **CAROLINA RECREATION**

PROJECT NAME:

# **ERWIN SPLASHPAD**

LOCATION:

**ERWIN** 

PROJECT NUMBER.

#### STRUCTURE TYPE: SINGLE POST PYR CANTI

**PRODUCT #124.2** 

12' x 12' x 8'e

**SCALE: AS NOTED** 

DRAWING S	SIZE:	В	

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		AL	ЗНС		
		MMK	Mau		
		09/29/20 MMK	DATE		
		RELEASE FOR CONSTRUCTION	NOITGIBOSED		
		NC	PEV		
Eng. By : AL	09/29/20				
Design By : MMK	09/29/20				
Approved By : AL	(	9/29	)/2		
DRAWING DESCRIPTION:					

**FOOTING DETAILS** 

75615-1.0

3000

NC





2'-0"

3" (MIN,

TYP UN)

**TOP VIEW** 

FINISHED -

SURFACE

- COLUMN

- VERTICAL REBAR

– PROVIDE TAPER

STD SLOPE (1:12)

PROJECTION

TIES #4

(PIH-EMBEDDED) USE FOR NON-CONSTRAINED CASES



