

# DSA Master Crafted Doors

## 6/0 x 8/0 TIFFANY ASHVILLE DOUBLE ARCH TOP W/TDL

### GENERAL NOTES:

- THIS PRODUCT IS DESIGNED TO COMPLY WITH THE CURRENT EDITION FLORIDA BUILDING CODE - BUILDING AND RESIDENTIAL REQUIREMENTS EXCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ) AT THE DESIGN PRESSURE(S) STATED HEREIN. THE PRODUCT DETAILS CONTAINED HEREIN ARE BASED UPON SIGNED AND SEALED TEST REPORT NO. ATLNC 0721.01-11 DATED 8/9/11 AND ASSOCIATED LABORATORY STAMPED DRAWINGS. TESTING WAS PERFORMED TO THE FOLLOWING:
  - ASTM E330-02
  - ASTM E283-04
- ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE / MASONRY AND 2X FRAMING AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING AND TRANSFERRING APPLIED PRODUCT LOADS TO THE STRUCTURE IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
- 1X AND 2X BUCKS (WHEN USED) SHALL BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO THE STRUCTURE. BUCK DESIGN AND INSTALLATION IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
- IN AREAS WHERE WIND-BORNE DEBRIS PROTECTION REQUIREMENTS EXIST, USE OF AN APPROVED IMPACT PROTECTIVE SYSTEM IS REQUIRED WITH THIS PRODUCT.
- MATERIALS
  - DOOR FRAME AND ASTRAGAL MATERIAL: MAHOGANY
  - STILES AND RAILS: #2 YELLOW PINE W/ HARDWOOD VENEER
- GLAZING:
  - 5/8" OVERALL THICKNESS: 1/8" TEMPERED, 3/8" AIR SPACE, 1/8" TEMPERED. GLAZED USING ALEX ULTRA ACRYLIC LATEX SEALANT PLUS SILICONE - 230 GRADE SEALANT.
  - GLASS MEETS THE REQUIREMENTS OF ASTM E1300-04e01.
- SITE CONDITIONS THAT DEVIATE FROM THE DETAILS OF THIS DRAWING REQUIRE FURTHER ENGINEERING EVALUATION BY A LICENSED ENGINEER OR REGISTERED ARCHITECT.
- DESIGNATIONS "X" AND "O" (WHERE APPLICABLE) STAND FOR THE FOLLOWING:
  - X: OPERABLE PANEL
  - O: FIXED PANEL
- HARDWARE (AS-TESTED; SUBSTITUTIONS ALLOWED PER FBC REQUIREMENTS):
  - ACTIVE PANEL: LOCKSET HANDLE AND DEADBOLT BY BALDWIN.
  - INACTIVE PANEL: 19" FLUSH BOLTS WITH REINFORCEMENT PLATE AT TOP AND BOTTOM OF PANEL.
  - HINGES: (4) STEEL 4" X 4" BALL BEARING HINGES BY PHILADELPHIA HARDWARE GROUP.

### INSTALLATION ANCHORAGE DETAILS

#### INSTALLATION NOTES:

- SEE ELEVATION (SHEET 3), SECTION VIEWS (SHEETS 7 AND 8) AND DETAILS (SHEETS 5 AND 6) FOR INSTALLATION ANCHOR TYPE, LOCATION, QUANTITY AND PLACEMENT IN 2X WOOD FRAMING OR 2X WOOD BUCKING. FOR INSTALLATION ANCHORS IN CONCRETE AND MASONRY CONSTRUCTION, SEE NOTE 2 BELOW.
- INSTALLATIONS DETAILS DEPICTED IN THIS PRODUCT APPROVAL DOCUMENT USE WOOD SCREWS EMBEDDED INTO SUPPORTING SUBSTRATE THAT IS EITHER 2X WOOD FRAMING OR 2X WOOD BUCKING STRUCTURALLY ATTACHED TO CONCRETE/MASONRY SUBSTRATE. WHERE INSTALLATION ANCHORS ARE EMBEDDED INTO CONCRETE/MASONRY EITHER WITH/WITHOUT 1X WOOD BUCKING, CONCRETE SCREWS SHALL BE USED. THE FOLLOWING TYPES OF INSTALLATION FASTENERS SHALL BE EMPLOYED BASED ON THE SUPPORTING SUBSTRATE AS FOLLOWS.
  - 2X WOOD FRAMING OR BUCKING AT HEAD, SILLS OR JAMBS
    - INSTALLATION DETAILS SHOWN ON SHEETS 3 THROUGH 7 DEPICT INSTALLATION REQUIREMENTS USING NO. 12 WOOD SCREWS.
    - SEE NOTE 3 BELOW FOR SCREWS SPECIFICATIONS, MINIMUM EMBEDMENT, SPACING AND EDGE DISTANCES.
  - CONCRETE OR MASONRY AT HEAD, SILLS OR JAMBS (OPTIONAL 1X WOOD BUCK ALLOWED)
    - 1/4" DIAMETER ELCO ULTRACON CONCRETE SCREWS SHALL BE USED IN LIEU OF NO. 12 WOOD SCREWS IN ALL LOCATIONS WHERE SUPPORTING SUBSTRATE IS CONCRETE OR MASONRY EXCEPT AS NOTED IN NOTE 2.2.2 BELOW.
    - 3/16" DIAMETER ELCO ULTRACON CONCRETE SCREWS SHALL BE USED IN LIEU OF NO. 12 WOOD SCREWS IN ALL LOCATIONS WHERE SUPPORTING SUBSTRATE IS CONCRETE OR MASONRY IN THE FOLLOWING INSTANCES.
      - DETAIL 1, SHEET 5 - TOP STRIKE PLATE - FLUSH BOLT.
      - DETAIL 2, SHEET 5 - BOTTOM STRIKE PLATE - FLUSH BOLT.
      - DETAIL 3, SHEET 5 - THRESHOLD SECTION.
      - DETAIL 4, SHEET 5 - CLOSED HINGE (APPLICABLE TO #12 X 3-1/2" WS LOCATION ONLY).
        - MIN. SPACING MUST BE MAINTAINED. ALTERNATE 3/16" ELCO ULTRACON IN HINGE HOLES TO MEET MINIMUM SPACING.
      - DETAIL 5, SHEET 5 - OPEN HINGE (APPLICABLE TO #12 X 3-1/2" WS LOCATION ONLY).
        - MIN. SPACING MUST BE MAINTAINED. ALTERNATE 3/16" ELCO ULTRACON IN HINGE HOLES TO MEET MINIMUM SPACING.
      - DETAIL 6, SHEET 6 - JAMB ANCHORAGE AT HINGE (APPLICABLE TO #12 X 3-1/2" WS LOCATION ONLY).
        - MIN. SPACING MUST BE MAINTAINED. ALTERNATE 3/16" ELCO ULTRACON IN HINGE HOLES TO MEET MINIMUM SPACING.
- INSTALLATION SCREW (ANCHORAGE) SPECIFICATION
  - NO. 12 WOOD SCREWS AT THE LENGTHS SHOWN IN THE INSTALLATION DETAILS.
    - WOOD SCREWS SHALL MEET ANSI B18.6.1 AND BE A MINIMUM GRADE 2 STRENGTH
    - MINIMUM EMBEDMENT IS 1-1/2". WOOD SCREW LENGTHS CAN BE VARIED IF NEEDED AS LONG AS MINIMUM EMBEDMENT IS MAINTAINED. THIS REQUIREMENT APPLICABLE TO SUBSTRATE EMBEDDED SCREWS ONLY.
    - MINIMUM EDGE DISTANCE AND SPACING BETWEEN SCREW IS 7/8".
  - 1/4" DIAMETER ELCO ULTRACON CONCRETE SCREWS
    - MINIMUM EMBEDMENT IS 1-3/4" IN CONCRETE AND 1-1/4" IN MASONRY (CMU).
    - MINIMUM EDGE DISTANCE IS 2-1/2".
    - MINIMUM SPACING BETWEEN SCREWS IS 1-1/2".
  - 3/16" DIAMETER ELCO ULTRACON CONCRETE SCREWS
    - MINIMUM EMBEDMENT IS 1-3/4" IN CONCRETE AND 1-1/4" IN MASONRY (CMU).
    - MINIMUM EDGE DISTANCE IS 2-1/2".
    - MINIMUM SPACING BETWEEN SCREWS IS 1-1/8".
- THE NUMBER OF INSTALLATION ANCHORS DEPICTED IS THE MINIMUM NUMBER OF ANCHORS TO BE USED FOR PRODUCT INSTALLATION AT THE MAXIMUM SIZE SHOWN. SMALLER PRODUCT SIZES CAN HAVE LESS ANCHORS AS LONG AS THE EDGE DISTANCE AND ON CENTER (O.C.) SPACING ARE THE SAME AS OR LESS THAN THAT SHOWN. INSTALLATION ANCHORS AT THE STRIKE PLATES AND HINGES SHALL REMAIN THE SAME.
- SHIM AS REQUIRED AT EACH INSTALLATION ANCHOR WITH LOAD BEARING SHIM(S). MAXIMUM ALLOWABLE SHIM SIZE IS 1/4 INCH. SHIM WHERE SPACE OF 1/16 INCH OR GREATER OCCURS. SHIM(S) SHALL BE CONSTRUCTED OF HIGH DENSITY PLASTIC OR BETTER. SHIMS MAY NOT BE SHOWN IN THE SECTION VIEWS OF THIS DRAWING FOR CLARITY
- MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDE WALL FINISHES (INCLUDING BUT NOT LIMITED TO STUCCO, FOAM, BRICK VENEER AND SIDING).
- SINGLE DOOR IS APPROVED AND SHALL BE INSTALLED IN A MANNER IN COMPLIANCE WITH THE REQUIREMENTS OF THIS PRODUCT APPROVAL DOCUMENT.

TABLE OF CONTENTS	
SHEET	DESCRIPTION
1	NOTES - GENERAL & INSTALLATION
2	ELEVATION
3	ELEVATION - ANCHOR LAYOUT
4	ELEVATIONS - HINGES & BRICK MOULD
5	DETAILS 1 THRU 5
6	DETAILS 6 THRU 10
7	DOOR SECTIONS - VERTICAL
8	DOOR SECTIONS - HORIZONTAL
9	GLASS DETAIL - D.L.O.
10 THRU 13	APPROVED CONFIGURATIONS

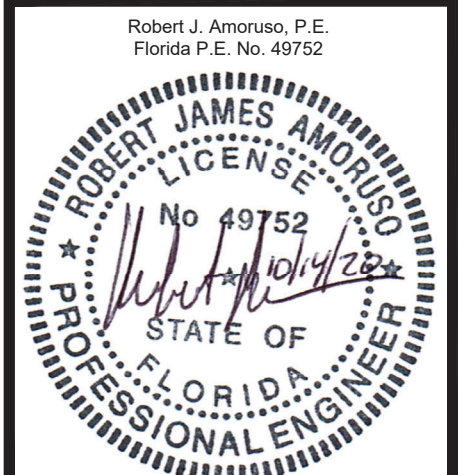
PERFORMANCE RATING			
DESIGN PRESSURE RATING (PSF)		WATER PENETRATION RATING	IMPACT RATING
MAXIMUM UNIT DIMENSIONS AND GLAZING	UP TO O.A. SIZE SHOWN ON ELEVATION VIEW		
75-1/4" X 98-5/16" XX INSWING ARCH TOP	±50.0	NONE (1)	NONE
NOTE 1: PRODUCT NOT TESTED FOR WATER PENETRATION RESISTANCE. THEREFORE THE PRODUCT MUST BE USED WHERE WATER PENETRATION IS NOT REQUIRED OR WHERE AN OVERHANG MEETING THE REQUIREMENTS OF THE CURRENT EDITION FBC/FRC HAS BEEN EMPLOYED.			

PROJECT #420-0601

DSA Master Crafted Doors  
10681 World Trade Blvd  
Raleigh, NC 27617

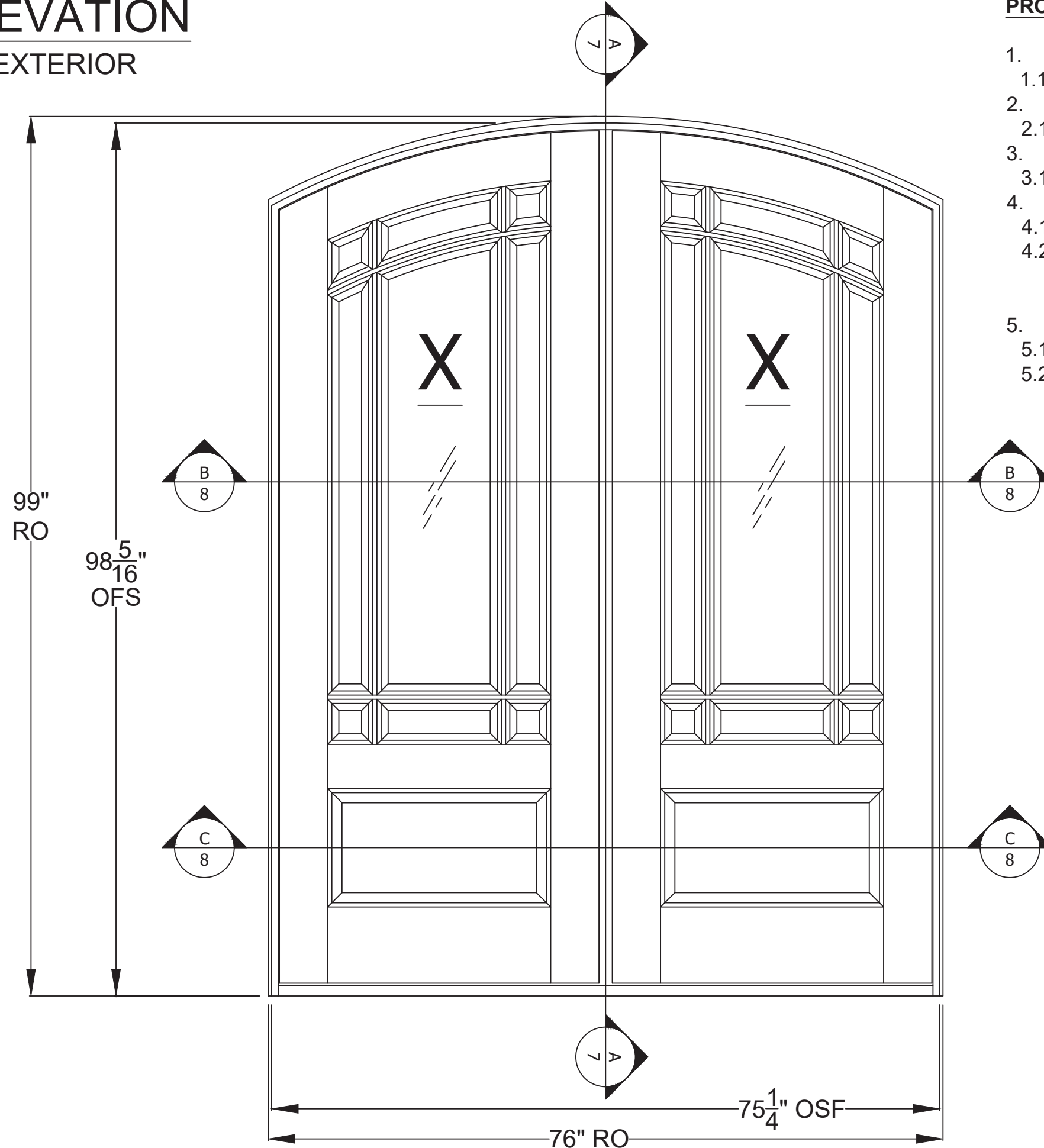
TITLE: 6/0 x 8/0 TIFFANY ASHVILLE DOUBLE ARCH TOP W/TDL  
NOTES - GENERAL & INSTALLATION

DATE: 2/8/17  
DRAWING NO.: DSA0005  
SHEET: 1 OF 13  
DRAWN BY: RJA  
SCALE: N.T.S.  
REV: A



# ELEVATION

EXTERIOR



## PRODUCT LIMITATIONS:

1. MAXIMUM OVERALL (O.A.) FRAME SIZE
  - 1.1. 74-1/4" X 98-5/16"
2. MAXIMUM PANEL SIZE
  - 2.1. 36" X 96"
3. MINIMUM PANEL THICKNESS
  - 3.1. 1-3/4" (NOMINAL)
4. MAXIMUM DAYLIGHT OPENING (D.L.O.) TDL
  - 4.1. DOOR PANEL HAS 9 TDL LITES - SEE SHEET 9.
  - 4.2. MAXIMUM FULL VIEW LITE D.L.O. 23-3/8" X 61-5/8" (BASED ON UNCUT GLASS SIZE OF 24-7/8" X 63-1/8" - 3/4" GLASS BITE)
5. RAISED PANEL SIZE
  - 5.1. BOTTOM: 25-1/8" X 13-3/8"
  - 5.2. TOP: 25-1/8" X 63-7/16"

PROJECT #420-0601				
			10/14/20	RJA
			UPDATED TO CURRENT FBC	
		A		REV
			DESCRIPTION	DATE
				BY

DSA Master Crafted Doors  
 10681 World Trade Blvd  
 Raleigh, NC 27617

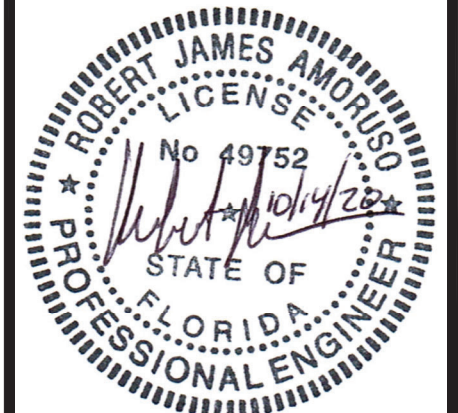
TITLE: 6/0 x 8/0 TIFFANY ASHVILLE DOUBLE ARCH TOP W/TDL  
 ELEVATION

DATE: 2/8/17  
 DRAWING NO: DSA0005  
 SCALE: N.T.S.  
 SHEET: 2 OF 13

DRAWN BY: RJA  
 PREPARED BY: N.T.S.  
 REV: A

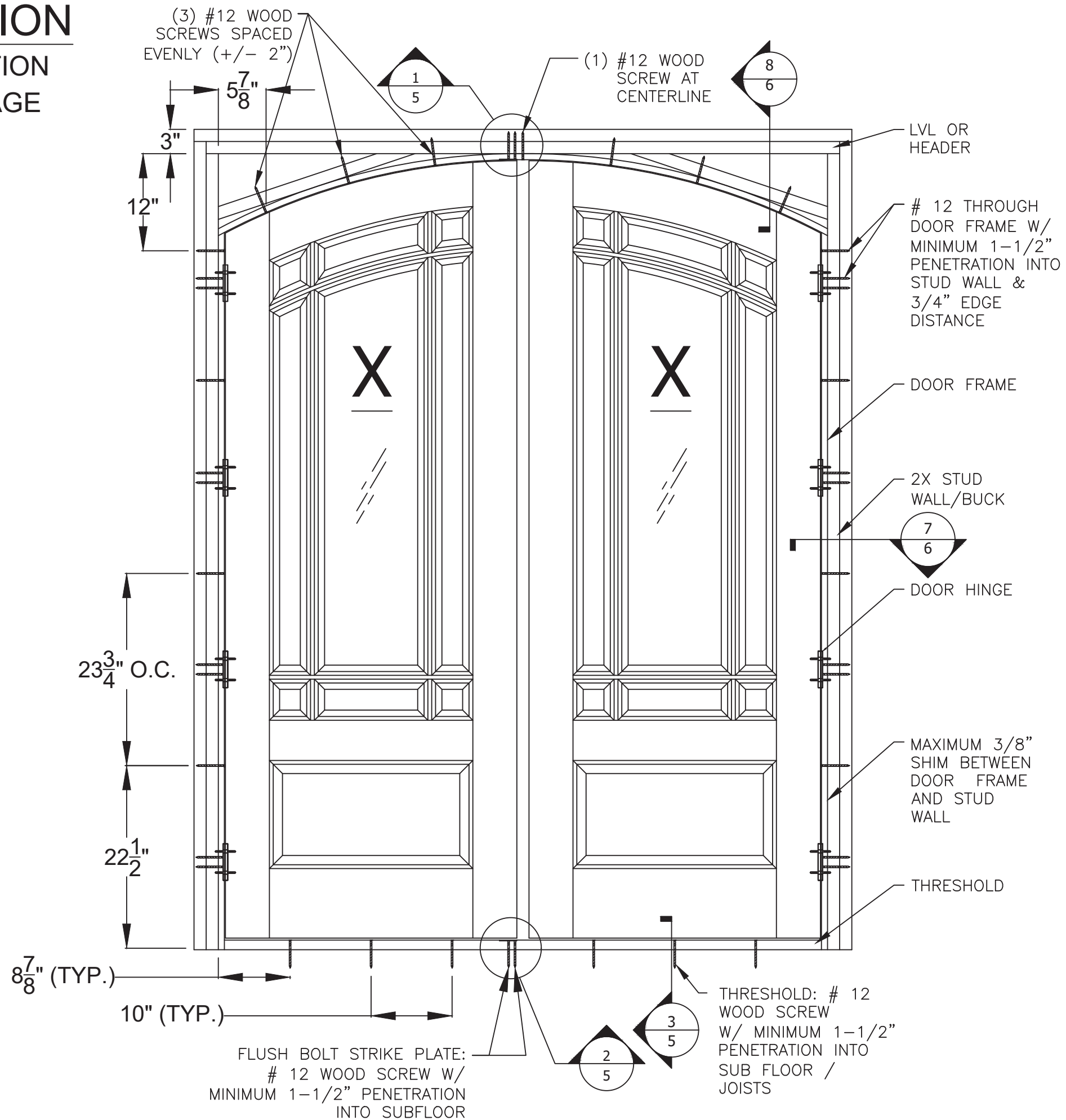
PTC PRODUCT DESIGN GROUP, LLC  
 10000 WOODLAND AVENUE  
 LONGWOOD, FLORIDA 32752  
 PHONE: 321.690.1788  
 FAX: 321.690.1789  
 EMAIL: info@ptc-corp.com

Robert J. Amoruso, P.E.  
 Florida P.E. No. 49752



# ELEVATION

## INSTALLATION ANCHORAGE



PROJECT #420-0601

			RJA	BY
			10/14/20	DATE
		A	UPDATED TO CURRENT FBC	DESCRIPTION
		REV		

DSA Master Crafted Doors  
10681 World Trade Blvd  
Raleigh, NC 27617

TITLE: 6/0 x 8/0 TIFFANY ASHVILLE DOUBLE ARCH TOP W/TDL  
ELEVATION - ANCHOR LAYOUT

DATE:	2/8/17
DRAWING NO.:	DSA0005
SCALE:	N.T.S.
REV:	A
SHEET:	3 OF 13

PREPARED BY: RJA

DATE: 2/8/17

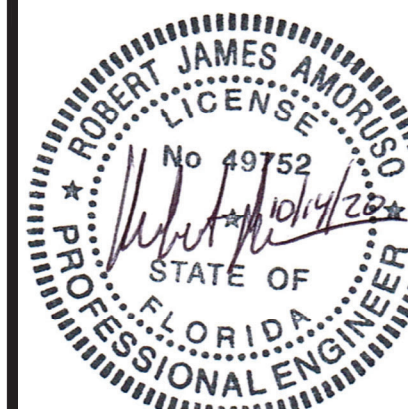
DRAWING NO.: DSA0005

SCALE: N.T.S.

REV: A

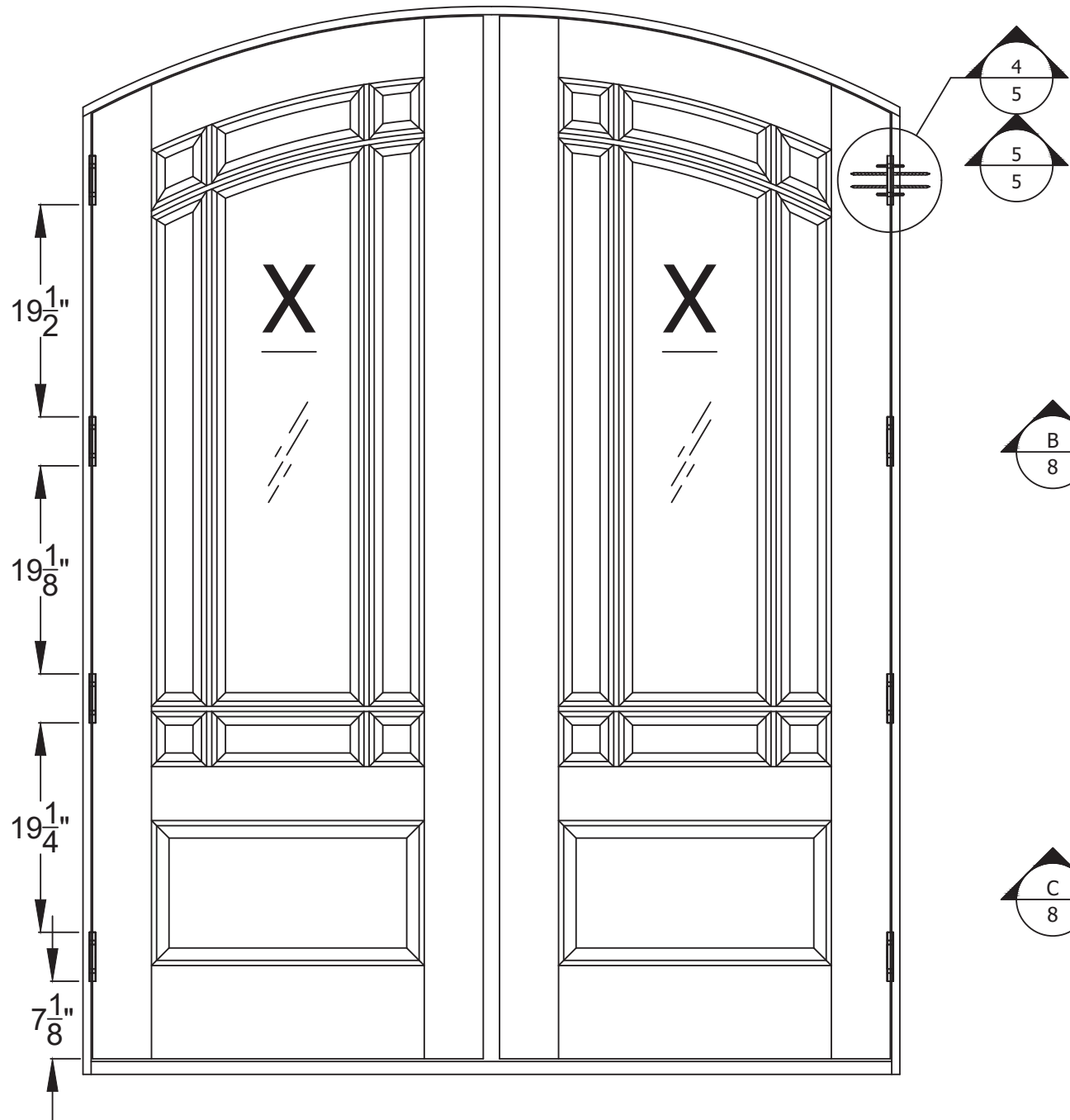
PTC PRODUCT DESIGN GROUP, LLC  
10000 WOODBRIDGE BLVD  
LONGWOOD, FLORIDA 32752  
PHONE: 321.690.1788  
FAX: 321.690.1789  
EMAIL: info@ptc-corp.com

Robert J. Amoruso, P.E.  
Florida P.E. No. 49752



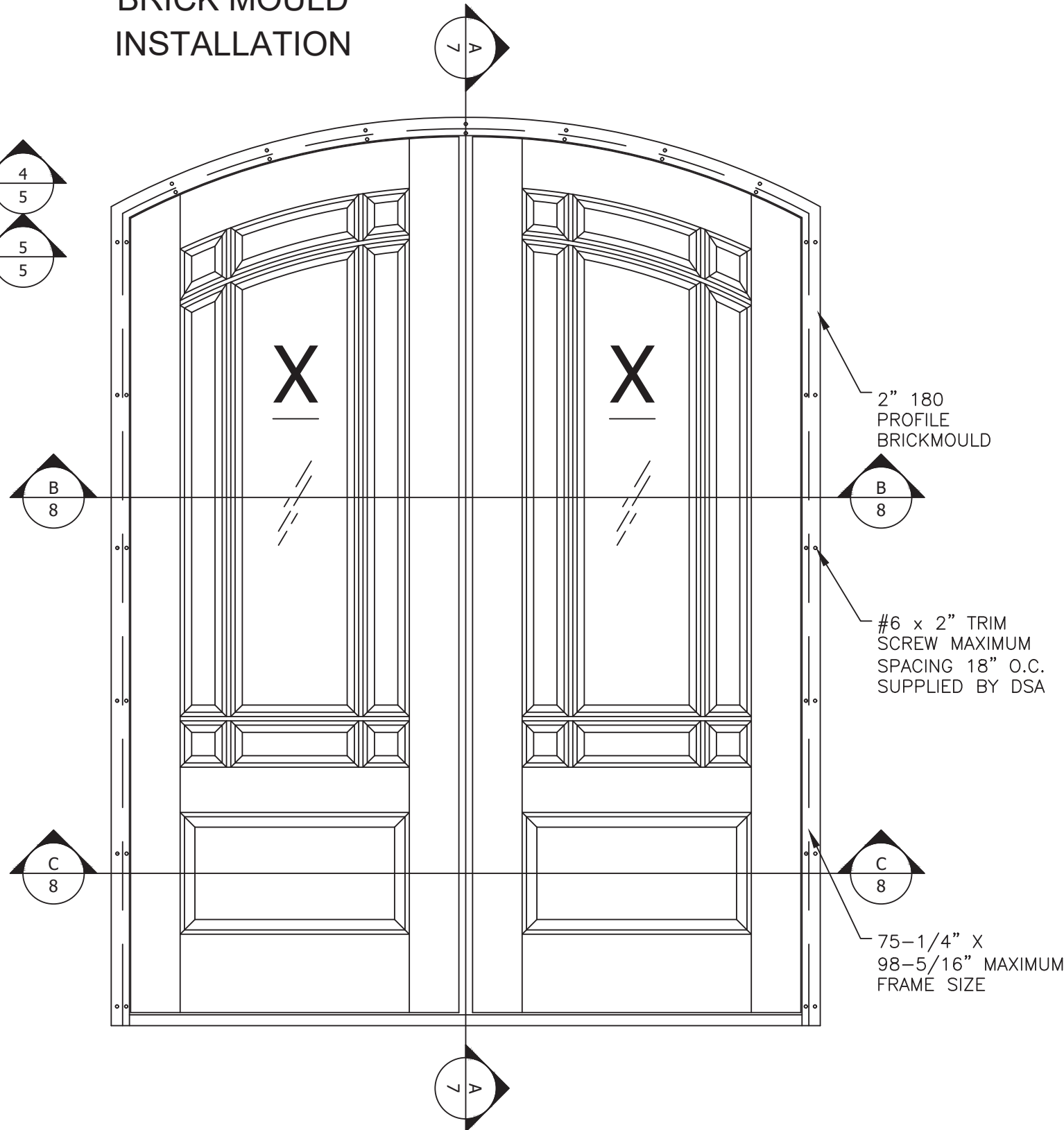
# ELEVATION

## HINGE LOCATION AND INSTALLATION



# ELEVATION

## BRICK MOULD INSTALLATION



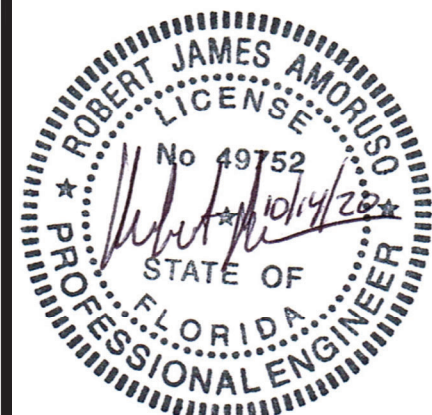
PROJECT #420-0601

				RJA	BY
			10/14/20		DATE
			UPDATED TO CURRENT FBC	A	DESCRIPTION
				REV	REV

DSA Master Crafted Doors  
10681 World Trade Blvd  
Raleigh, NC 27617

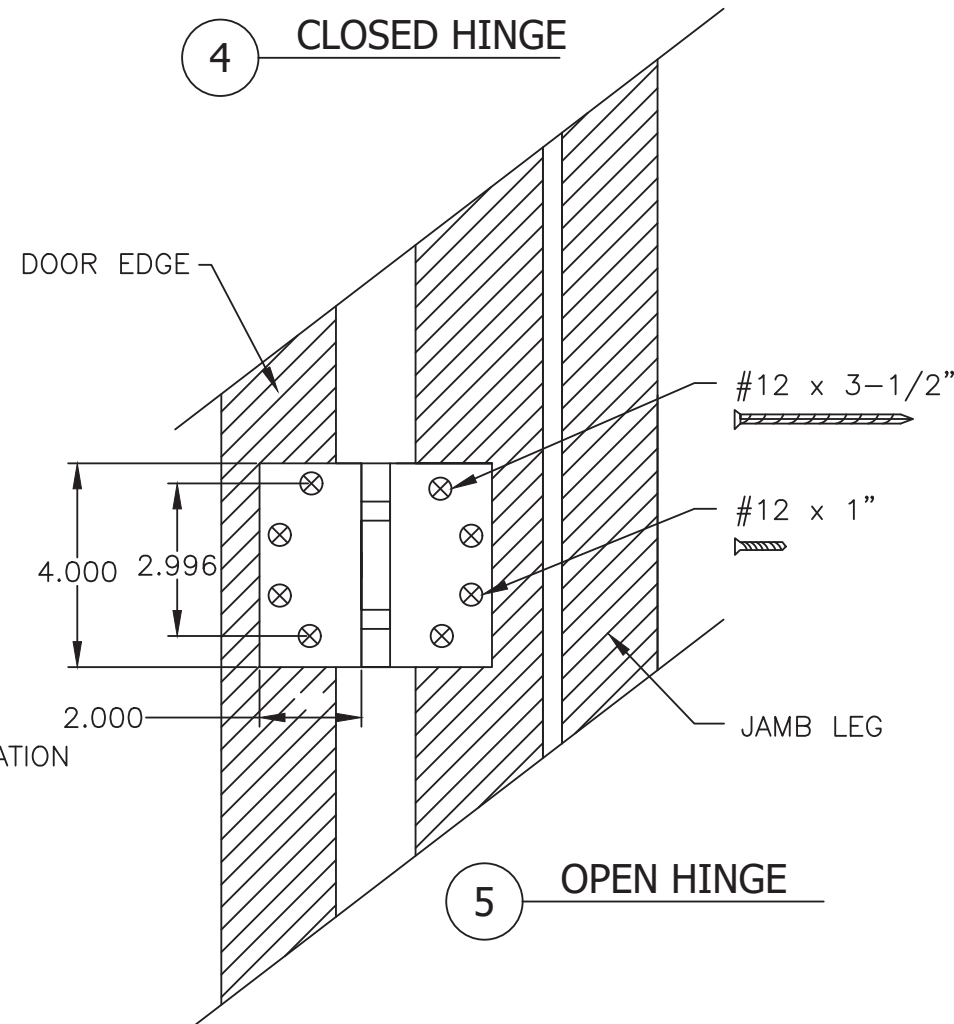
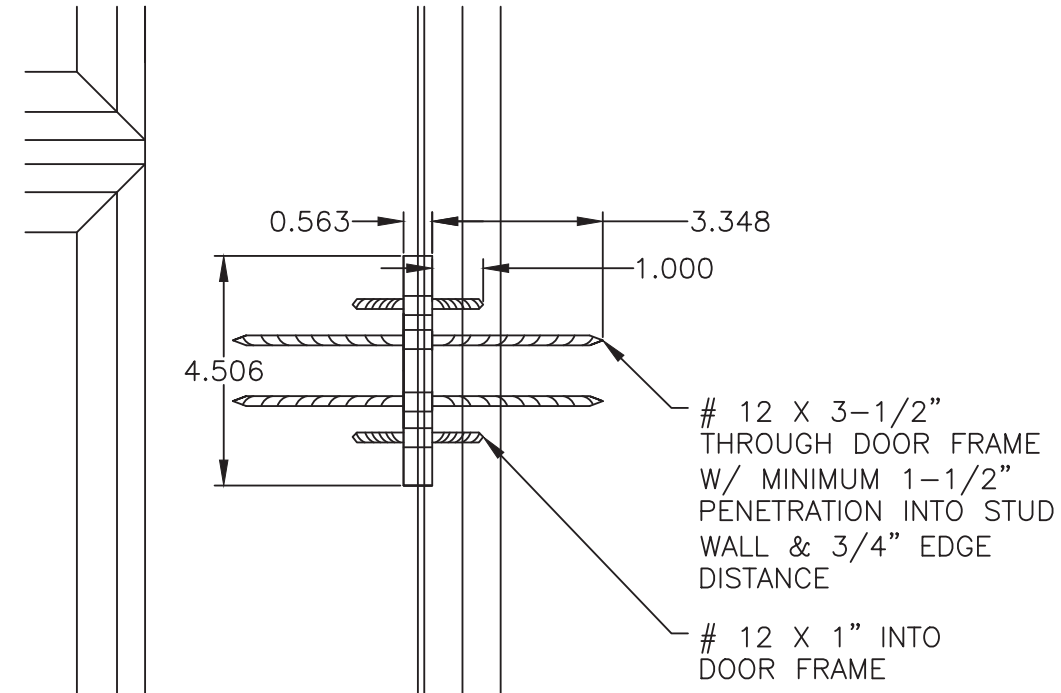
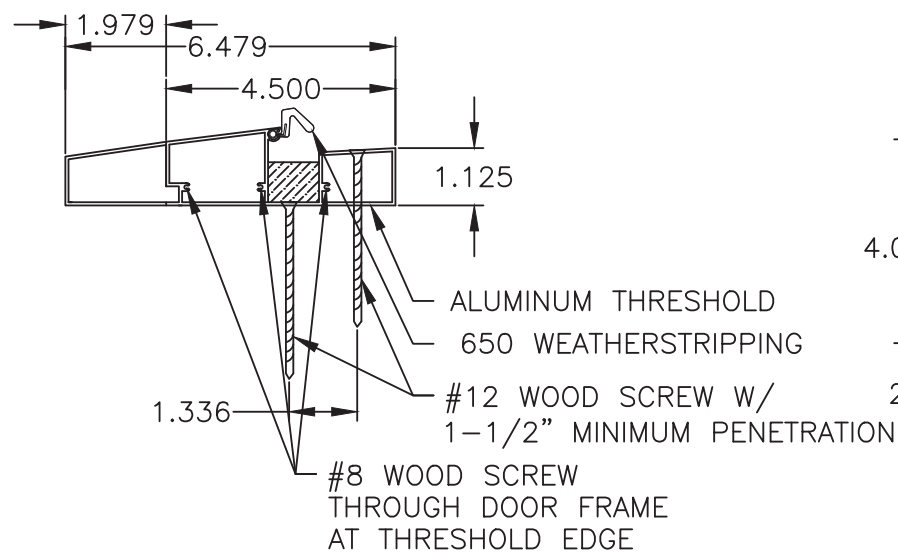
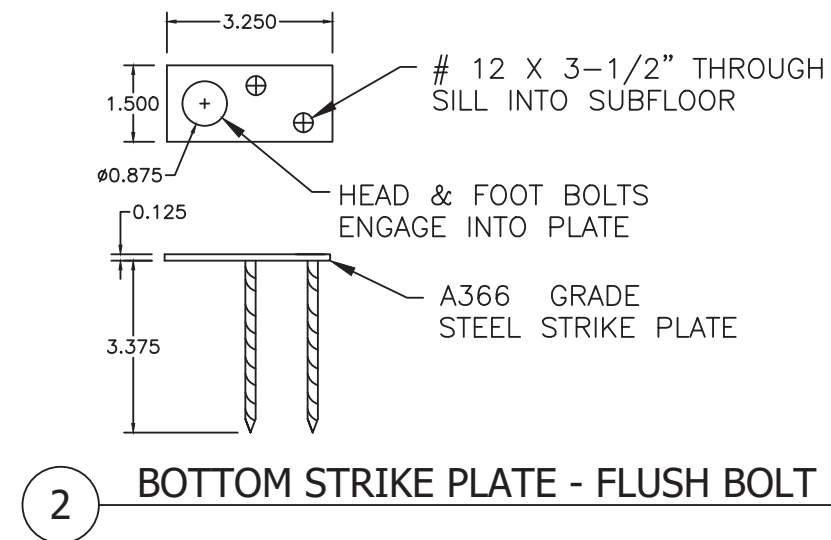
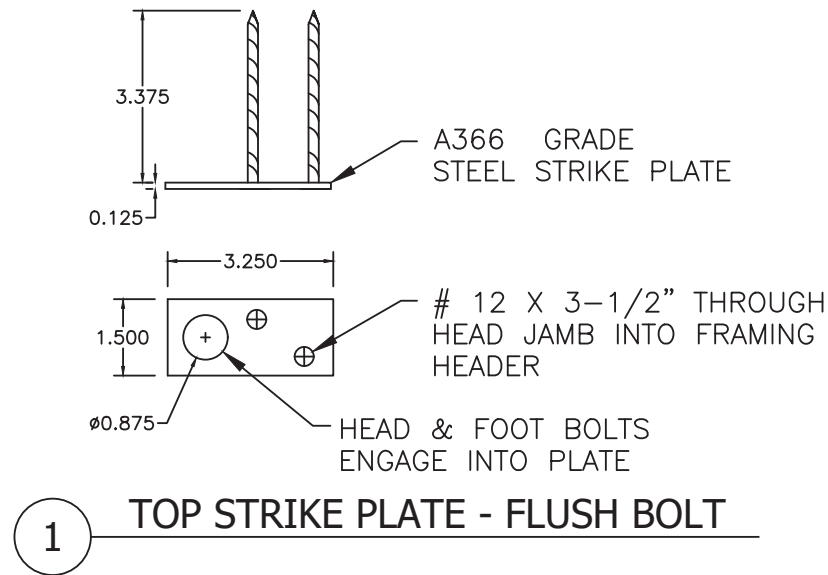
TITLE: 60 x 8/0 TIFFANY ASHVILLE DOUBLE ARCH TOP W/TDL ELEVATIONS - HINGES & BRICK MOULD	DRAWN BY: RJA	DATE: 2/8/17
	SCALE: N.T.S.	DRAWING NO: DSA0005
PREPARED BY: 	REV: A	SHEET: 4 OF 13

Robert J. Amoruso, P.E.  
Florida P.E. No. 49752





# DETAILS



PROJECT #420-0601

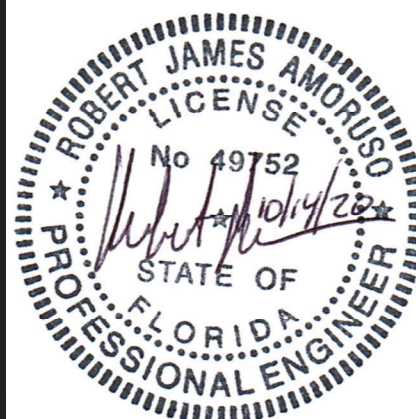
DSA Master Crafted Doors  
10681 World Trade Blvd  
Raleigh, NC 27617

TITLE: 6/0 x 8/0 TIFFANY ASHVILLE DOUBLE ARCH TOP W/TDL  
DETAILS 1 THRU 5

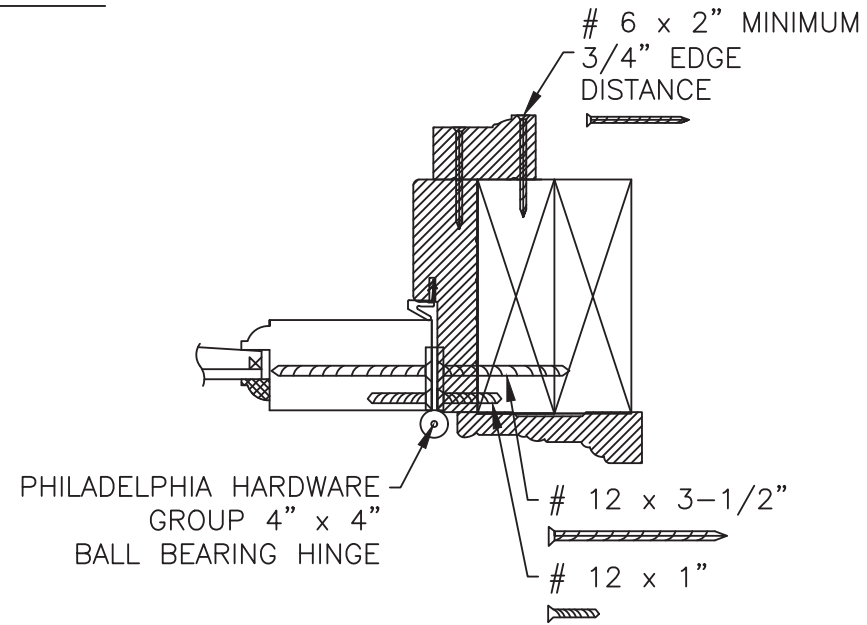
DATE:	2/8/17
DRAWING NO.:	DSA0005
SCALE:	N.T.S.
REV:	A
SHEET:	5 OF 13
DRAWN BY:	RJA
PREPARED BY:	

PTC PRODUCT DESIGN GROUP, LLC  
LONGWOOD, FLORIDA 32752  
PHONE: 321.690.1788  
FAX: 321.690.1789  
EMAIL: info@ptc-corp.com

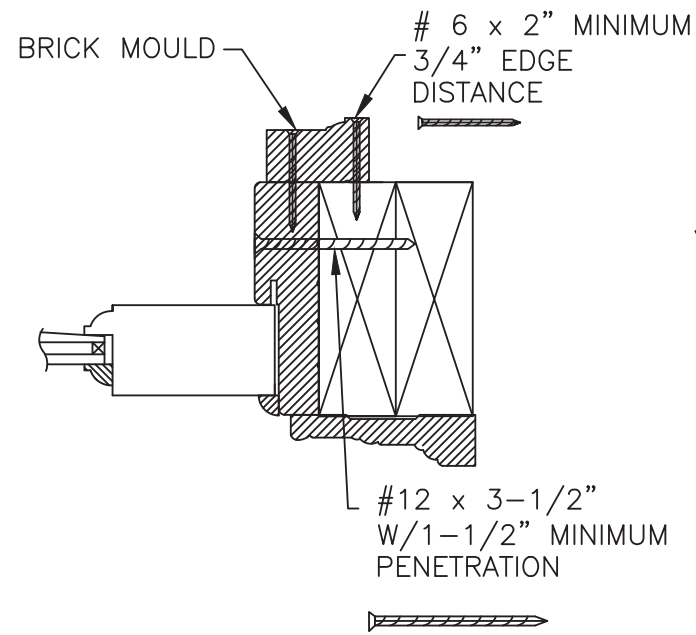
Robert J. Amoruso, P.E.  
Florida P.E. No. 49752



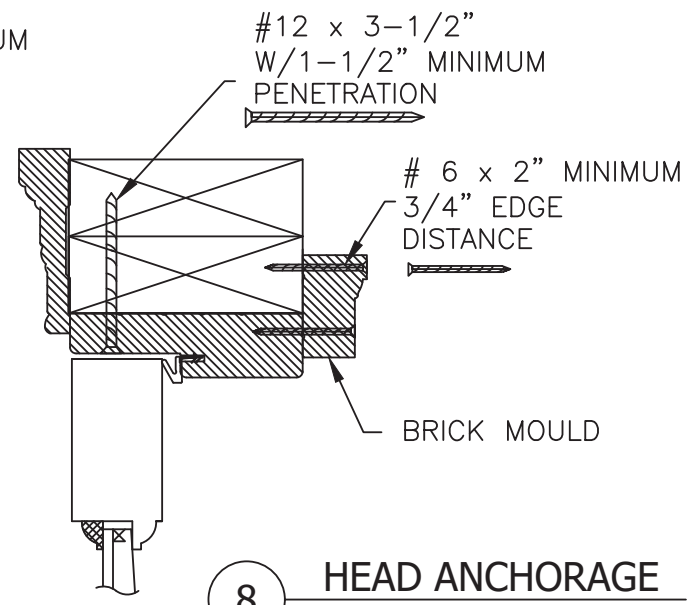
# DETAILS



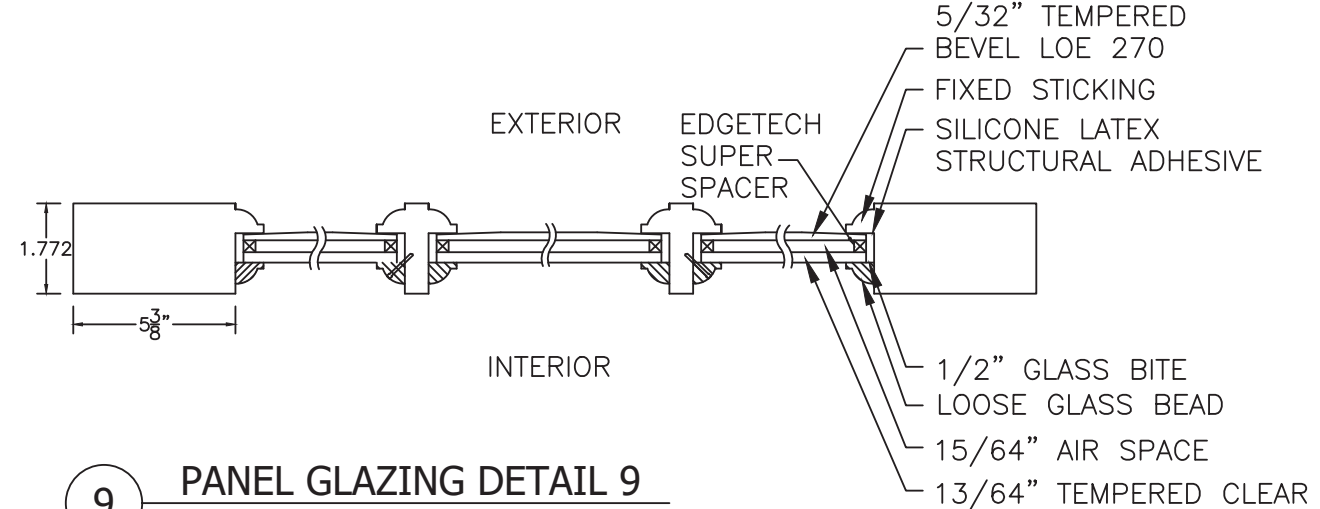
**6 JAMB ANCHORAGE @ HINGE**



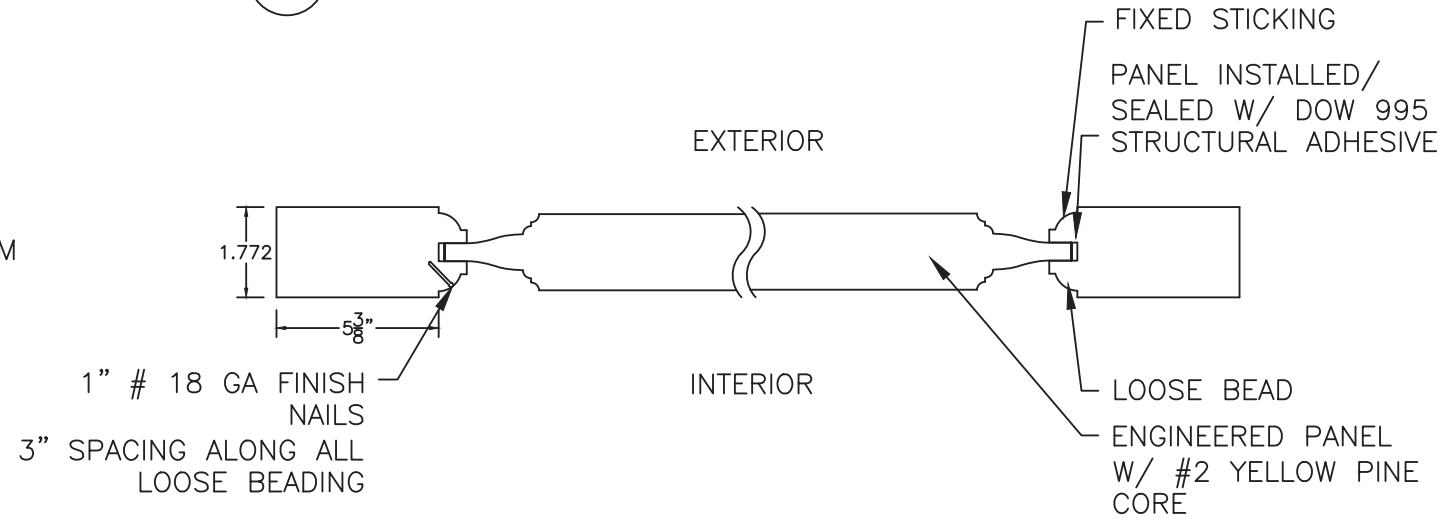
**7 JAMB ANCHORAGE**



**8 HEAD ANCHORAGE**



**9 PANEL GLAZING DETAIL 9**



**10 PANEL INFILL DETAIL 10**

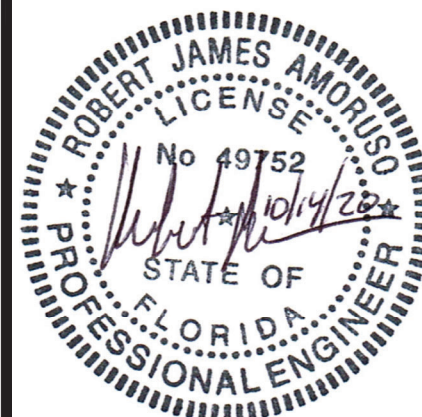
PROJECT #420-0601

DSA Master Crafted Doors  
10681 World Trade Blvd  
Raleigh, NC 27617

TITLE: 6/0 x 8/0 TIFFANY ASHVILLE DOUBLE ARCH TOP W/TDL  
DETAILS 6 THRU 10

DATE:	2/8/17
DRAWING NO.:	DSA0005
SCALE:	N.T.S.
REV:	A
DRAWN BY:	RJA
DATE:	2/8/17
DRAWING NO.:	DSA0005
SCALE:	N.T.S.
REV:	A
SHEET:	6 OF 13

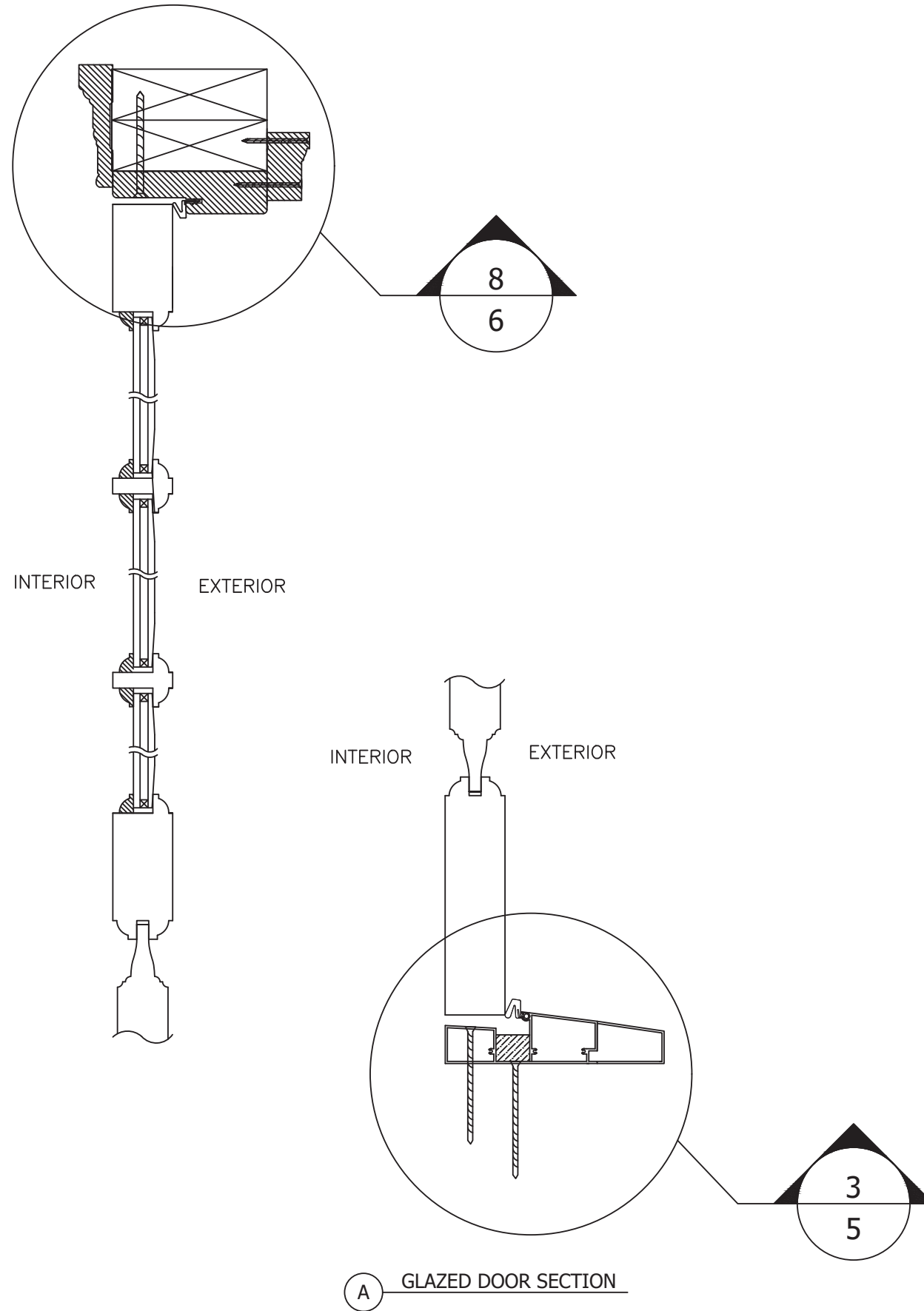
Robert J. Amoruso, P.E.  
Florida P.E. No. 49752



PTC PRODUCT DESIGN GROUP, LLC  
3000 WOODBRIDGE BLVD  
LONGWOOD, FLORIDA 32752  
PHONE: 321.690.1788  
FAX: 321.690.1789  
EMAIL: info@ptc-corp.com

# SECTIONS

## DOOR VERTICAL VIEWS



PROJECT #420-0601

DSA Master Crafted Doors  
10681 World Trade Blvd  
Raleigh, NC 27617

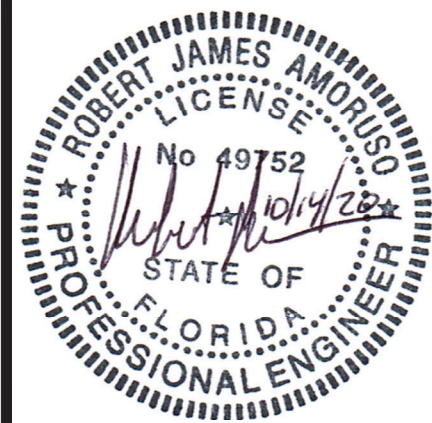
TITLE: 6/0 x 8/0 TIFFANY ASHVILLE DOUBLE ARCH TOP W/TDL  
DOOR SECTIONS - VERTICAL

PREPARED BY: RJA  
DATE: 2/8/17  
DRAWING NO.: DSA0005  
SCALE: N.T.S.  
SHEET: 7 OF 13  
REV: A

PTC PRODUCT DESIGN GROUP, LLC  
LONGWOOD, FLORIDA 32752  
FBPE C.A. NO. 25935  
Phone: 321.690.1788  
Fax: 321.690.1789  
Email: info@ptc-corp.com

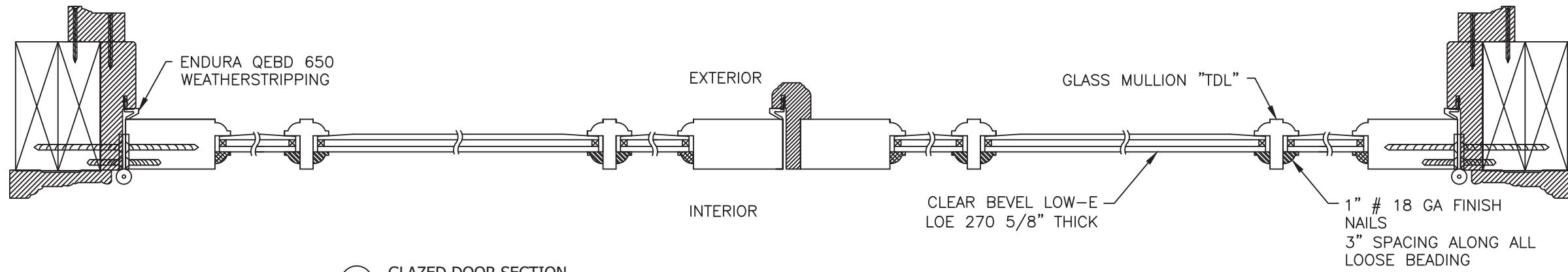
REV	DESCRIPTION	DATE	BY
A	UPDATED TO CURRENT FBC	10/14/20	RJA

Robert J. Amoruso, P.E.  
Florida P.E. No. 49752

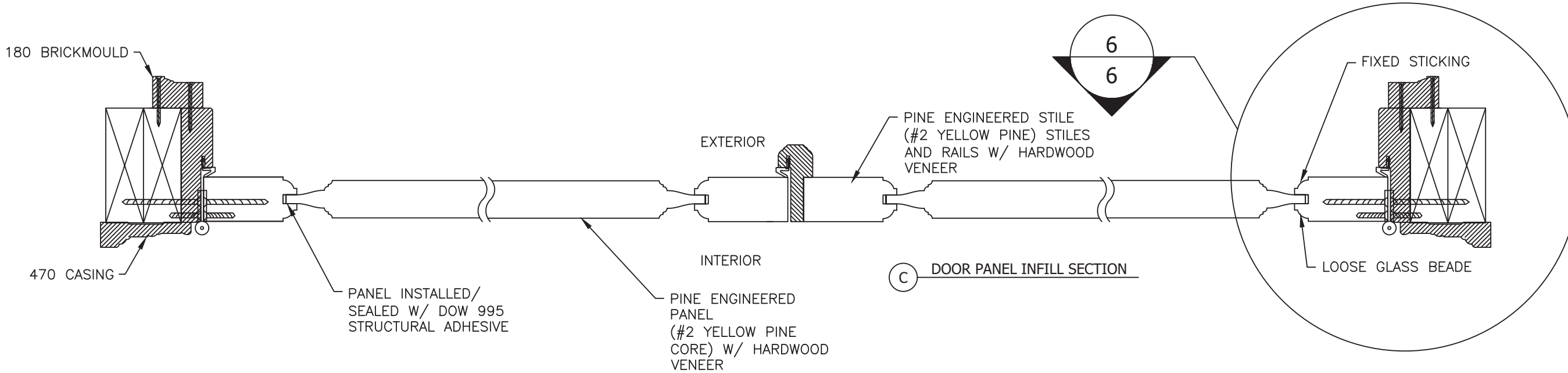


# SECTIONS

## DOOR HORIZONTAL VIEWS



**B** GLAZED DOOR SECTION



**C** DOOR PANEL INFILL SECTION

PROJECT #420-0601

DSA Master Crafted Doors  
10681 World Trade Blvd  
Raleigh, NC 27617

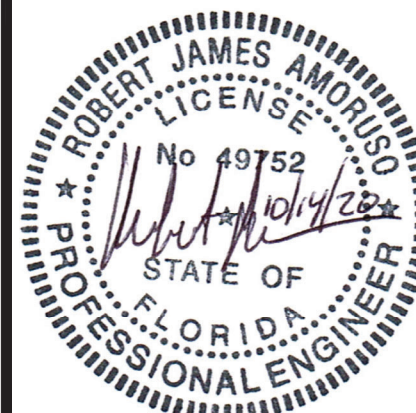
TITLE: 6'0" X 8'0" TIFFANY ASHVILLE DOUBLE ARCH TOP W/TDL DOOR SECTIONS - HORIZONTAL

REV	DESCRIPTION	DATE	BY
A	UPDATED TO CURRENT FBC	10/14/20	RJA

DRAWN BY:	RJA	DATE:	2/8/17
SCALE:	N.T.S.	DRAWING NO.:	DSA0005
REV:	A	SHEET:	8 OF 13



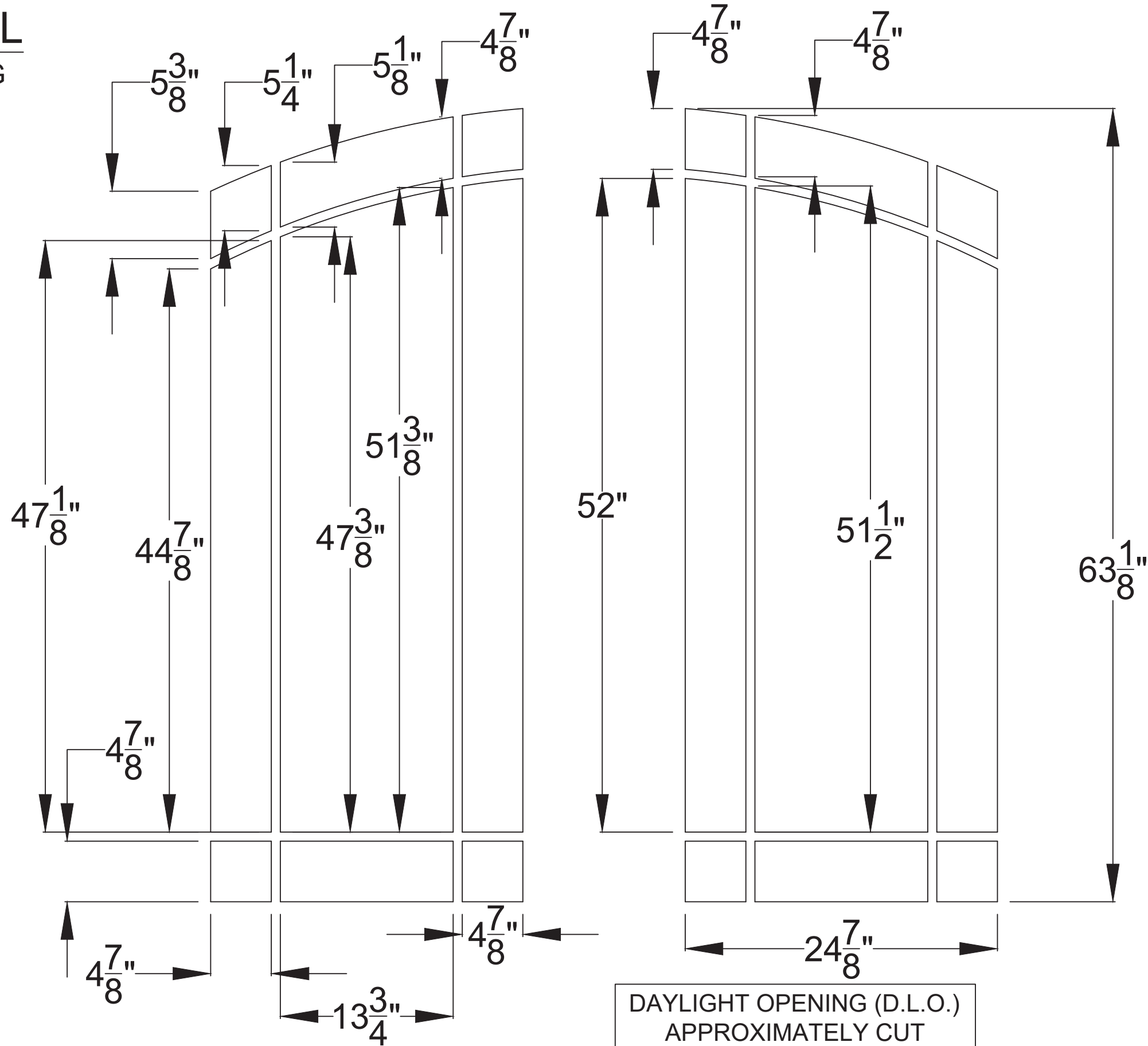
Robert J. Amoruso, P.E.  
Florida P.E. No. 49752





# GLASS DETAIL

## DAYLIGHT OPENING (D.L.O.)

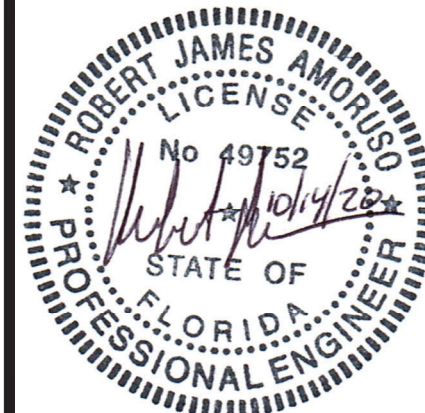


DAYLIGHT OPENING (D.L.O.)  
APPROXIMATELY CUT  
GLASS SIZE ABOVE - 3/4"

PROJECT #420-0601		DATE	BY
		10/14/20	RJA

DSA Master Crafted Doors 10681 World Trade Blvd Raleigh, NC 27617		DATE:	2/8/17
TITLE: 6/0 x 8/0 TIFFANY ASHVILLE DOUBLE ARCH TOP W/TDL GLASS DETAIL - D.L.O.		DRAWING NO.:	DSA0005
DRAWN BY:	RJA	SCALE:	N.T.S.
PREPARED BY:		REV:	A
PTC PRODUCT DESIGN GROUP, LLC 10000 W. UNIVERSITY BLVD. LONGWOOD, FLORIDA 32752 FBPE C.A. NO. 25935		SHEET:	9 OF 13

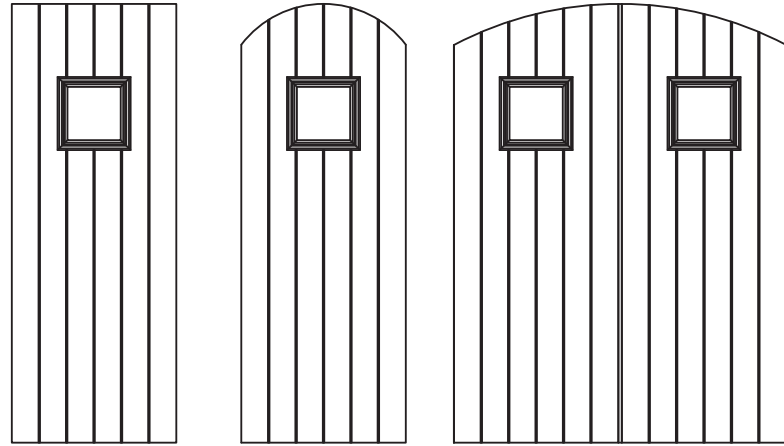
Robert J. Amoruso, P.E.  
Florida P.E. No. 49752



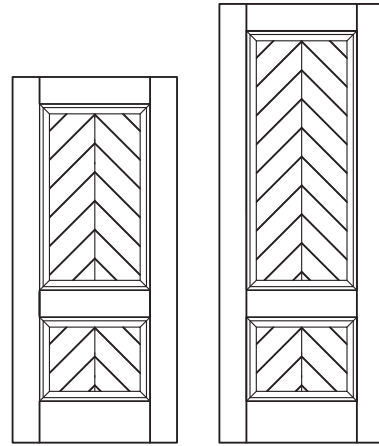
# APPROVED CONFIGURATIONS

MAXIMUM FRAME, DOOR PANEL AND D.L.O. SIZES SHOWN ON SHEET 2 MUST BE MET.

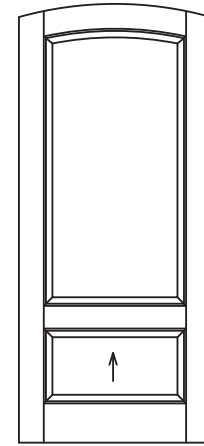
## ASPEN COLLECTION



## MANCHESTER COLLECTION



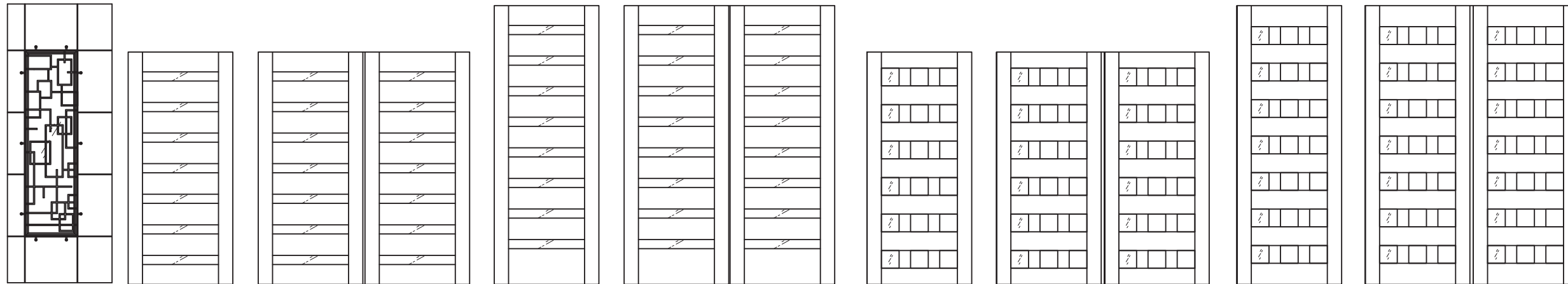
## TRINITY COLLECTION



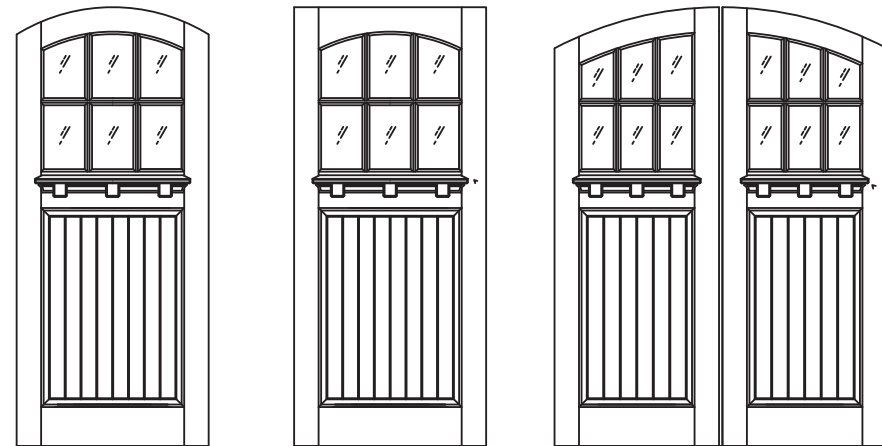
## RENAISSANCE COLLECTION



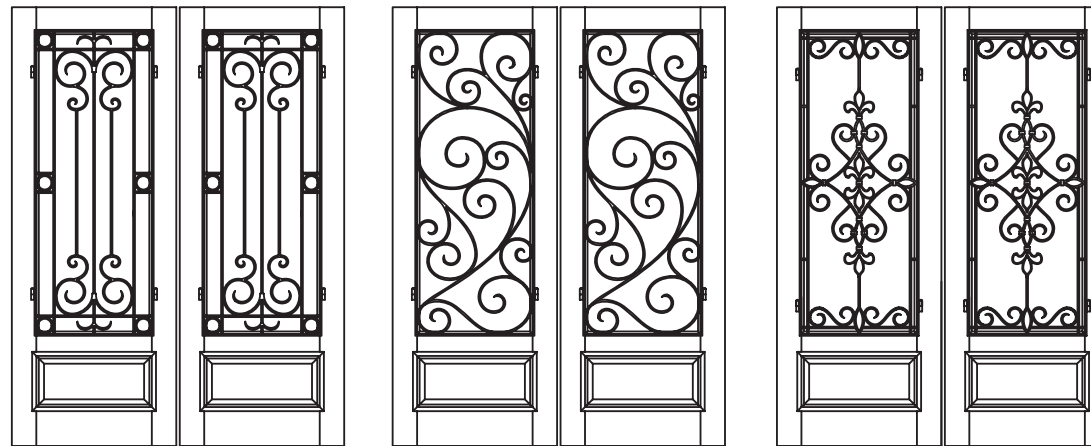
## MILAN COLLECTION



## LINVILLE COLLECTION



## WAKEFIELD COLLECTION



PROJECT #420-0601

DSA Master Crafted Doors  
10681 World Trade Blvd  
Raleigh, NC 27617

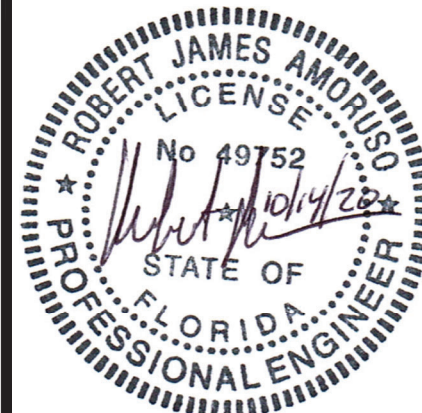
TITLE: 6/0 x 8/0 TIFFANY ASHVILLE DOUBLE ARCH TOP W/TDL  
APPROVED CONFIGURATIONS

PREPARED BY: RJA  
DATE: 2/8/17  
DRAWING NO.: DSA0005  
SCALE: N.T.S.  
REV: A  
SHEET: 10 OF 13



PTC PRODUCT DESIGN GROUP, LLC  
LONGWOOD, FLORIDA 32752  
PHONE: 321.690.1788  
FAX: 321.690.1789  
EMAIL: info@ptc-corp.com

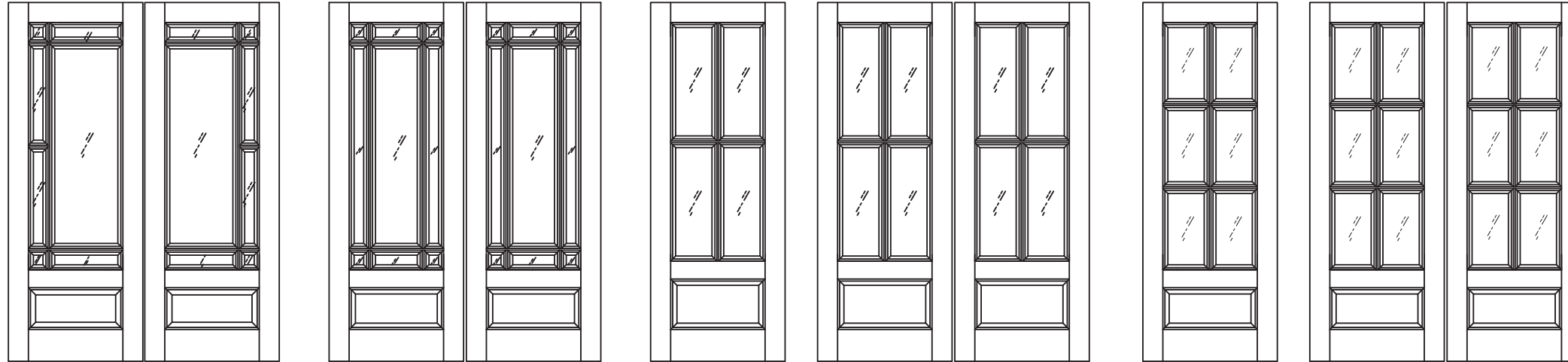
Robert J. Amoruso, P.E.  
Florida P.E. No. 49752



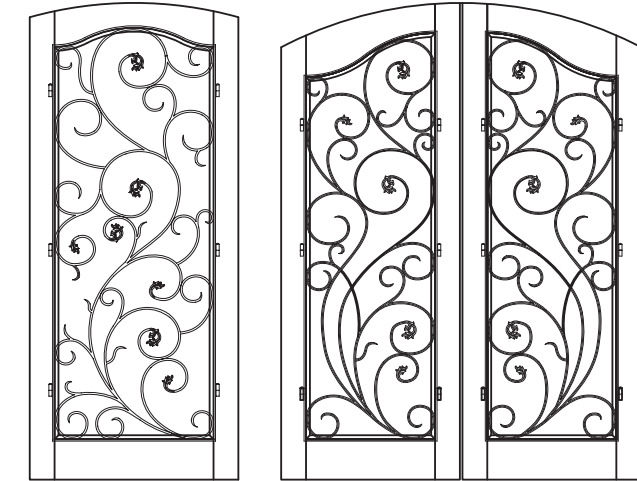
# APPROVED CONFIGURATIONS

MAXIMUM FRAME, DOOR PANEL AND D.L.O. SIZES SHOWN ON SHEET 2 MUST BE MET.

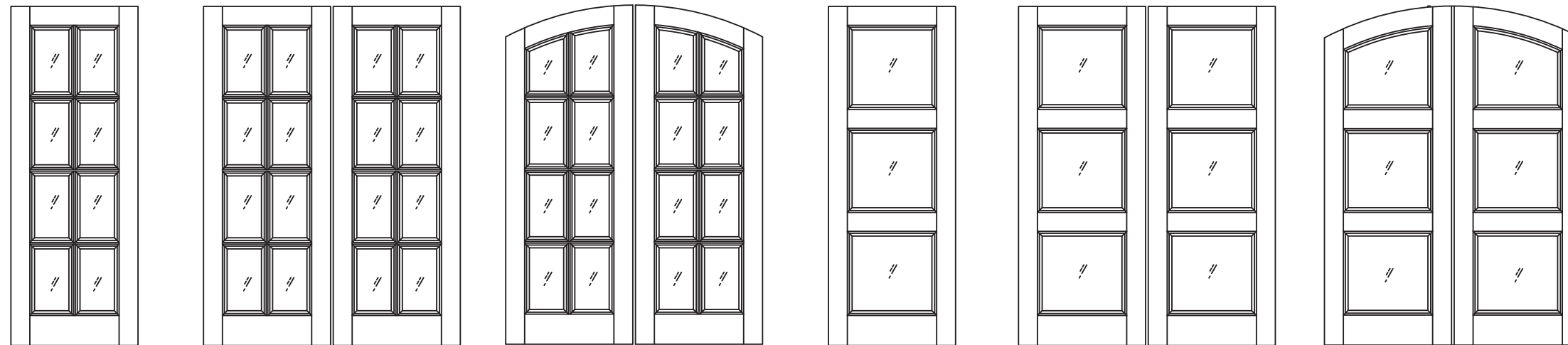
## ALEXANDRIA COLLECTION



## CLIFFS REDWOOD COLLECTION



## FULL VIEW COLLECTION



PROJECT #420-0601			
		UPDATED TO CURRENT FBC	RJA
		10/14/20	DATE
			BY

DSA Master Crafted Doors  
 10681 World Trade Blvd  
 Raleigh, NC 27617

TITLE: 6/0 x 8/0 TIFFANY ASHVILLE DOUBLE ARCH TOP W/TDL APPROVED CONFIGURATIONS  
 PREPARED BY: RJA  
 DRAWN BY: RJA  
 DATE: 2/8/17  
 SCALE: N.T.S.  
 DRAWING NO.: DSA0005  
 REV: A  
 SHEET: 11 OF 13

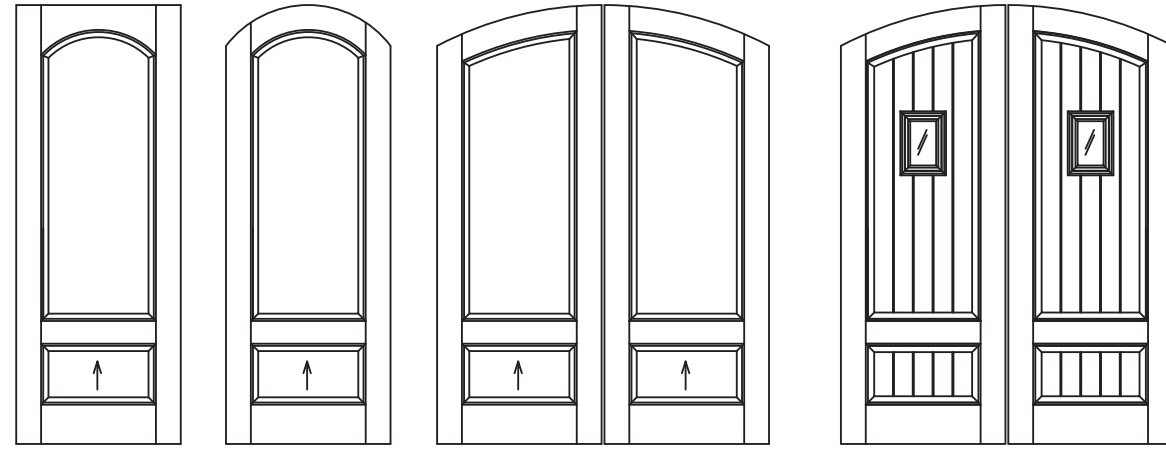
PTC PRODUCT DESIGN GROUP, LLC  
 LONGWOOD, FLORIDA 32752  
 Phone: 321.690.1788  
 Fax: 321.690.1789  
 Email: info@ptc-corp.com

Robert J. Amoruso, P.E.  
 Florida P.E. No. 49752

# APPROVED CONFIGURATIONS

MAXIMUM FRAME, DOOR PANEL AND D.L.O. SIZES SHOWN ON SHEET 2 MUST BE MET.

## TIFFANY COLLECTION



PROJECT #420-0601

DSA Master Crafted Doors  
10681 World Trade Blvd  
Raleigh, NC 27617

TITLE: 6/0 x 8/0 TIFFANY ASHVILLE DOUBLE ARCH TOP W/TDL  
APPROVED CONFIGURATIONS

PREPARED BY: RJA  
DATE: 2/8/17  
DRAWING NO.: DSA0005  
SCALE: N.T.S.  
SHEET: 12 OF 13  
REV: A



PTC PRODUCT DESIGN GROUP, LLC  
LONGWOOD, FLORIDA 32752  
PHONE: 321.690.1788  
FAX: 321.690.1789  
EMAIL: info@ptc-corp.com  
FBPE C.A. NO. 25935

Robert J. Amoruso, P.E.  
Florida P.E. No. 49752

