

## Report Of:

- **2017 Florida Building Code - Building**
- **2017 Florida Building Code - Residential**

**WARNING** No representation or warranty is given that your particular application of these products complies with relevant building codes or that the fasteners provided or used are appropriate for your application. Consult with professionals and local building officials before beginning work: (i) to ensure compliance with relevant building codes for your application and for your proposed use of fasteners; (ii) to ensure the integrity of the structural components in connection with which these products are to be used; (iii) to identify appropriate safety gear that is to be used during installation; (iv) to ensure that the work area is free from utilities, services and hazards; and (v) to clarify any instructions or warnings that may not be clear. Work in a safe manner wearing protective gear such as gloves, eyewear, headwear, footwear and clothing. When using tools comply with operation manuals and instructions. Metal and glass may have sharp edges and could fragment or splinter during or as a result of handling or cutting. Do not use these products in connection with any substance that is or may be harmful or corrosive to the products. Inspect and maintain these products and the structural components that they are used in connection with on a regular basis, using professionals when appropriate.

## PEAK® ALUMINUM FENCING AQUATINE™ PLUS

Review for compliance with  
2017 Florida Building Code – Building and  
2017 Florida Building Code – Residential

Peak Products USA Corporation

June 19, 2020

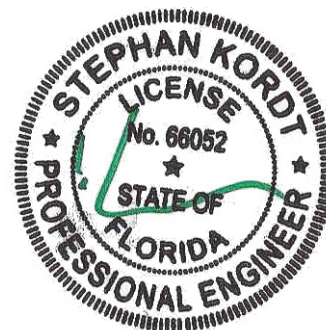
RJC No. VAN.106169.0029

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06 19 2020



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## 1.0 OVERVIEW

The Peak® Aluminum Fencing Aquatine™PLUS is intended to act as a barrier around a pool area to prevent access to the pool area, but not to protect against a fall to a lower elevation. The objective of this report was to complete a review of the requirements stipulated in the 2017 Florida Building Code – Building (FBR) and 2017 Florida Building Code – Residential (FRC). Our review included Section 454: Swimming Pools and Bathing Places (Public and Private) of the 2017 FBC and Sections 42: Swimming Pools (Electrical Provisions) and 45: Private Swimming Pools of the 2017 FRC.

## 2.0 BARRIER REQUIREMENTS CHECKLIST

The following table represents a summary of the compliance requirements stipulated in Section 454 of the 2017 FBC and Sections 42 and 45 of the 2017 FRC. This review is limited to these compliance requirements, and does not evaluate the system for any other aspects, site specific or otherwise.

Verdict	Clause	Description	Comment
✓	FBC 454.1.3.1.9	All pools surrounded by a 48 inch high fence	Top of barrier 48 inches above grade
✓	FBC 454.1.3.1.9	Gates are 48 inches high from the ground or floor	Gate 48 inches above grade
✓	FBC 454.1.3.1.9	Gates are self-latching, with a latch located 54 inches from the bottom of the gate or at least 3 inches below the top of the gate on the pool side	Gate equipped with self-latching device 54 inches above grade
N/A	FBC 454.2.17 FRC R4501.17	Exception for swimming pools, spas and hot tubs with a powered safety cover that complies with ASTM F1346	
✓	FBC 454.2.17.1.1 FRC R4501.17.1.1	Top of barrier not less than 48 inches above grade on the side of barrier that faces away from the pool or spa	Top of barrier 48 inches above grade
✓	FBC 454.2.17.1.1 FRC R4501.17.1.1	Vertical clearance between grade and bottom of barrier shall not exceed 2 inches on the side of the barrier that faces away from the pool	Maximum 2 inches clearance
✓	FBC 454.2.17.1.1 FRC R4501.17.1.1	Vertical clearance between the top of the pool or spa and the bottom of the barrier shall not exceed 4 inches when barrier is mounted on top of the pool or spa that is above grade	Maximum 2 inches clearance
✓	FBC 454.2.17.1.2 FRC R4501.17.1.2	Openings in the barrier shall not allow passage of 4-inch diameter sphere	Maximum 4 inch openings



Verdict	Clause	Description	Comment
✓	FBC 454.2.17.1.3 FRC R4501.17.1.3	Solid barrier surfaces shall not contain indentations or protrusions	Smooth glass surface
N/A	FBC 454.2.17.1.4 FRC R4501.17.1.4	Spacing between vertical members shall not exceed 1 3/4 inches in width, and spacing within decorative cutouts in vertical members shall not exceed 1 3/4 inches when horizontal members are spaced less than 45 inches between tops of horizontal members	Horizontal members spaced 45 1/2 inches apart
✓	FBC 454.2.17.1.5 FRC R4501.17.1.5	Spacing between vertical members shall not exceed 4 inches in width, and spacing within decorative cutouts in vertical members shall not exceed 1 3/4 inches when horizontal members are spaced greater than 45 inches between tops of horizontal members	Maximum 4 inch spacing, no decorative cutouts
N/A	FBC 454.2.17.1.6 FRC R4501.17.1.6	Chain link dimensions	Only applies to chain link barriers
N/A	FBC 454.2.17.1.7 FRC R4501.17.1.7	Diagonal members	No diagonal members
✓	FBC 454.2.17.1.8 FRC R4501.17.1.8	<b>Gates:</b> Access gates shall be equipped to accommodate a locking device on the pool side of the gate, opening outward from the pool or spa, and shall be self-closing and have a self-latching device	Gate equipped with self-latching device, hinge self closes, opens away from pool
✓	FBC 454.2.17.1.8 FRC R4501.17.1.8	Device release mechanism can be on either side of gate, out of reach of young child over top or through any gap if device release is located greater than 54 inches above bottom of gate	Latch release mechanism located minimum 54 inches above grade
✓	FBC 454.2.17.1.8 FRC R4501.17.1.8	The gate and barrier shall not have openings greater than 1/2 inch within 18 inches of the release mechanism	Latch release mechanism located minimum 54 inches above bottom of gate. See Appendix B for more information.



Verdict	Clause	Description	Comment
N/A	FBC 454.2.17.1.9 FRC R4501.17.1.9	Structure wall as a barrier	
N/A	FBC 454.2.17.1.10 FRC R4501.17.1.10	Above-ground residential pool structure as a barrier	
N/A	FBC 454.2.17.1.11 FRC R4501.17.1.11	Screen barriers	
✓	FBC 454.2.17.1.12 FRC R4501.17.1.12	Barrier must be placed separate from any other structure, unless the other structure is being used as part of the barrier.	48 inch clear zone on both sides of fence
N/A	FBC 454.2.17.1.13 FRC R4501.17.1.13	Removable child barriers	
N/A	FBC 454.2.17.1.14 FRC R4501.17.1.14	Wall of dwelling as barrier	
N/A	FBC 454.2.17.1.15 FRC R4501.17.1.15	Mesh safety barrier	

This review is based on information and drawings provided by Peak Products USA Corporation for the elements listed above.

### 3.0 CONCLUSION

The Peak® Aluminum Fencing Aquatine™PLUS system meets the requirements within Section 454: Swimming Pools and Bathing Places (Public and Private) of the 2014 Florida Building Code, and Sections 42: Swimming Pools (Electrical Provisions) and 45: Private Swimming Pools, both of the 2014 Florida Building Code – Residential. Limitations of compliance are defined in the assembly drawings presented in Appendix A.



Yours truly,

READ JONES CHRISTOFFERSEN LTD.

A handwritten signature in blue ink, appearing to read 'L. Pianalto'.

2020-06-19

Leonard Pianalto, M.Sc., P.Eng., LEED® AP, FEC.  
Principal

Reviewed by:

A handwritten signature in blue ink, appearing to read 'S. Kordt'.

Digitally signed by  
Stephan Kordt, PE, SE  
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Date: 2020.06.19  
15:04:45 -07'00'

Stephan Kordt, SE, PE  
Kordt Engineering Group, President

LPi/akb

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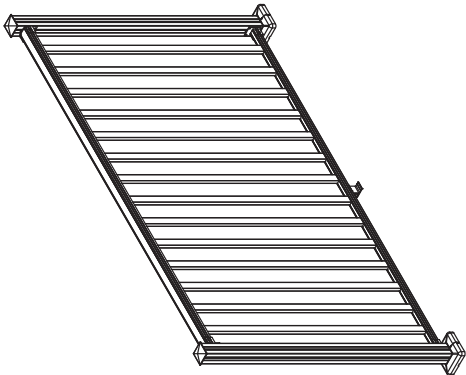
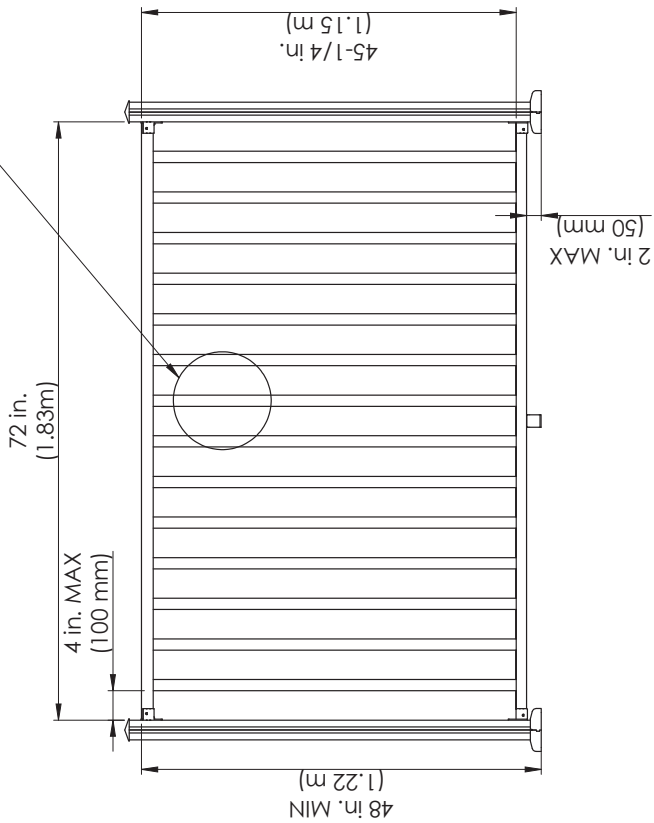
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**APPENDIX A**  
ASSEMBLY DRAWINGS -  
4'H FENCE SYSTEM



PEAK® ALUMINUM FENCING AQUATINE™ PLUS  
 Review for compliance with  
 2017 Florida Building Code – Building and Residential  
 2018 International Swimming Pool and Spa Code  
 Appendix A - Assembly Drawings

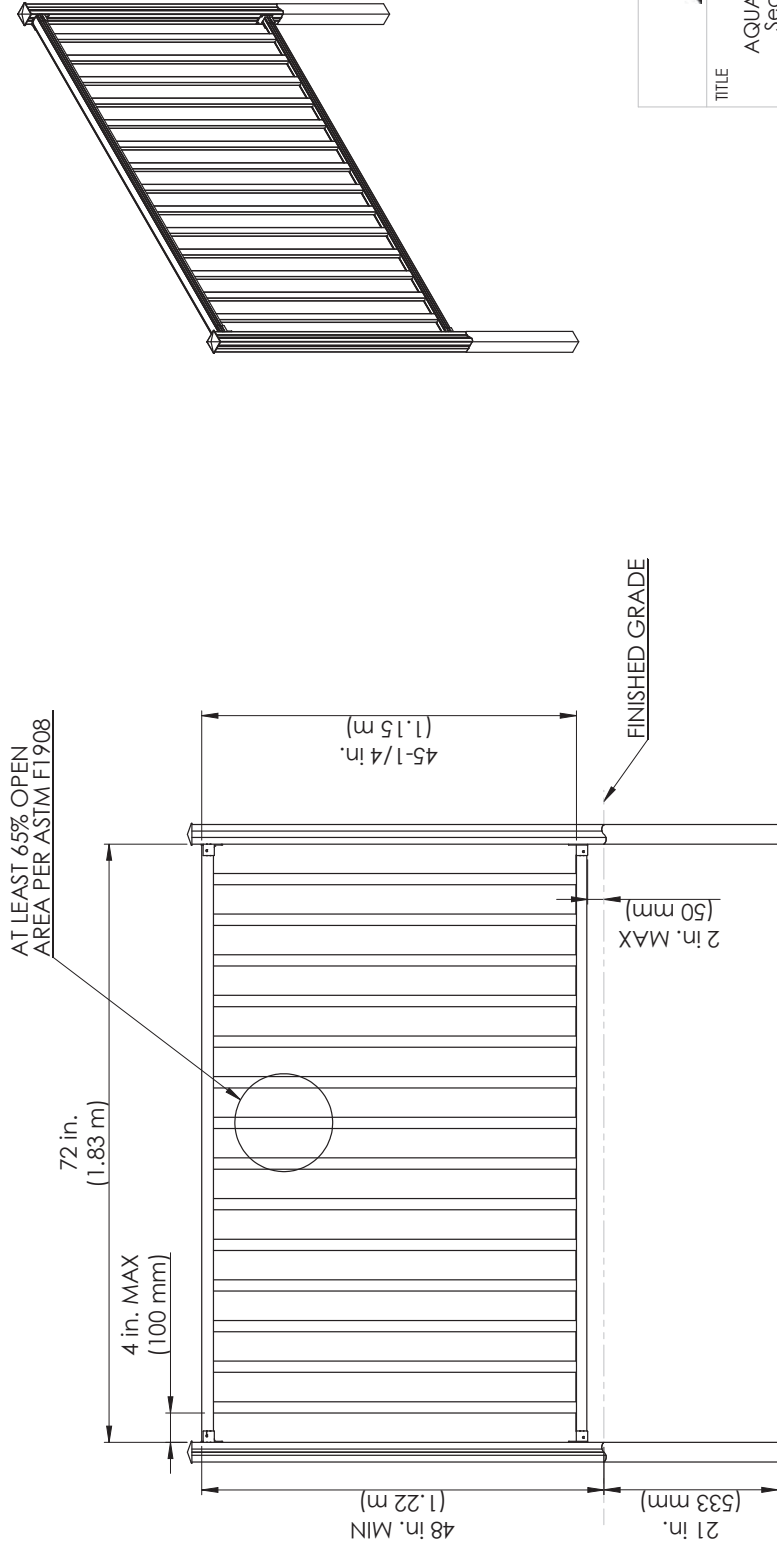
AT LEAST 65% OPEN  
 AREA PER ASTM F1908



TITLE	AQUATINE™ PLUS 6' Picket Section (Hard Surface)
PART FILE	Picket section with two end post-4ft
DWG REV	A
DIMENSIONS ARE IN MM UNLESS NOTED DO NOT SCALE DRAWING	
<b>PROPRIETARY AND CONFIDENTIAL</b>	
THIS DRAWING OR ANY PART THEREOF IS THE PROPERTY OF THE PEAK GROUP OF COMPANIES. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF THE PEAK GROUP OF COMPANIES IS PROHIBITED.	
SIZE	DWG. NO.
<b>B</b>	Picket Section-4ft
SCALE: 1:10	SHEET NO. 2015-03-03-A SHEET 1 OF 4

DESCRIPTION	SKU
4' Post - Hard Surface	57003, 57004
4'H x 6'W Picket Rail Kit	57113, 57114
Picket Bracket Kit	57901, 57902
Picket Angle Bracket Kit	57911, 57912

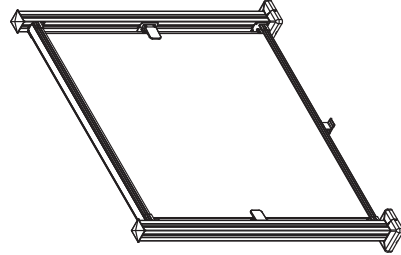
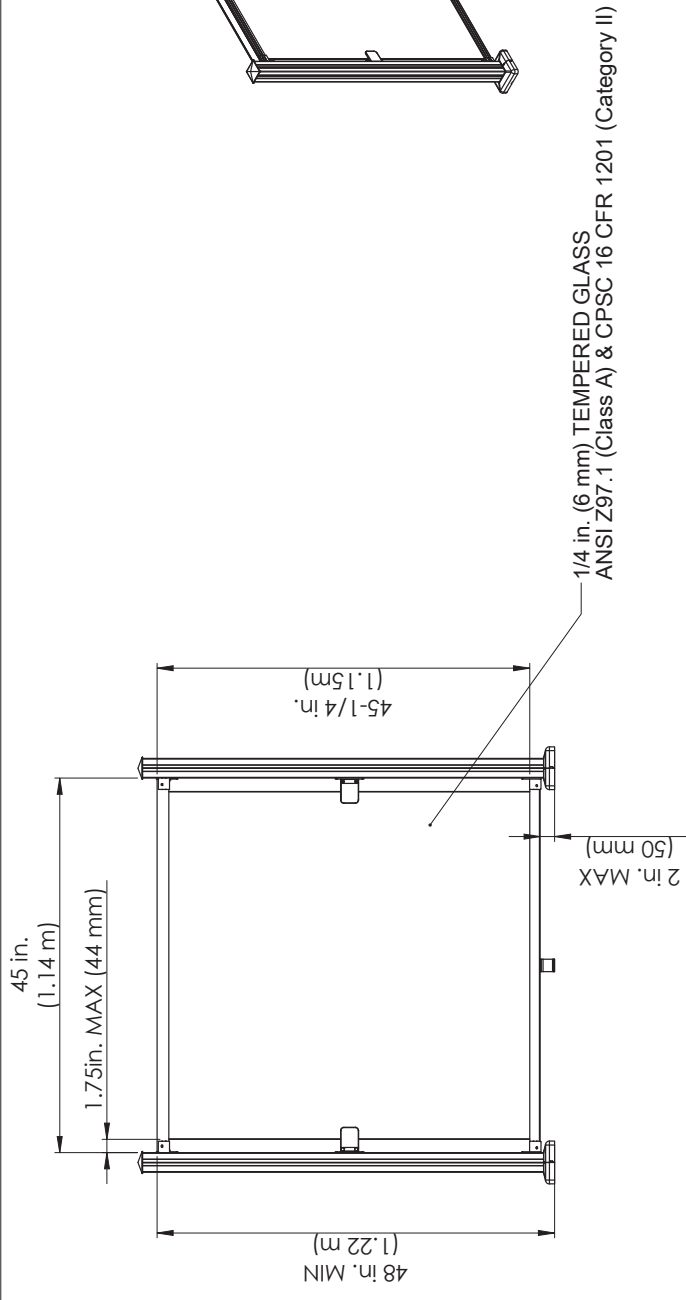
PEAK® ALUMINUM FENCING AQUATINE™ PLUS  
 Review for compliance with  
 2017 Florida Building Code – Building and Residential  
 2018 International Swimming Pool and Spa Code  
 Appendix A - Assembly Drawings




TITLE	AQUATINE™ PLUS 6' Picket Section (Soft Surface)
PART FILE	Picket section with two softscope post-4ft
DWG REV	A
DIMENSIONS ARE IN MM UNLESS NOTED DO NOT SCALE DRAWING	
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SIZE	DWG. NO.
<b>B</b>	Picket Section - In Ground-4ft
SCALE: 1:15	SHEET NO. 2015-03-03-A SHEET 2 OF 4

DESCRIPTION	SKU
4' Post - Soft Surface	57013, 57014
4'H x 6'W Picket Rail Kit	57113, 57114
Picket Bracket Kit	57901, 57902
Picket Angle Bracket Kit	57911, 57912

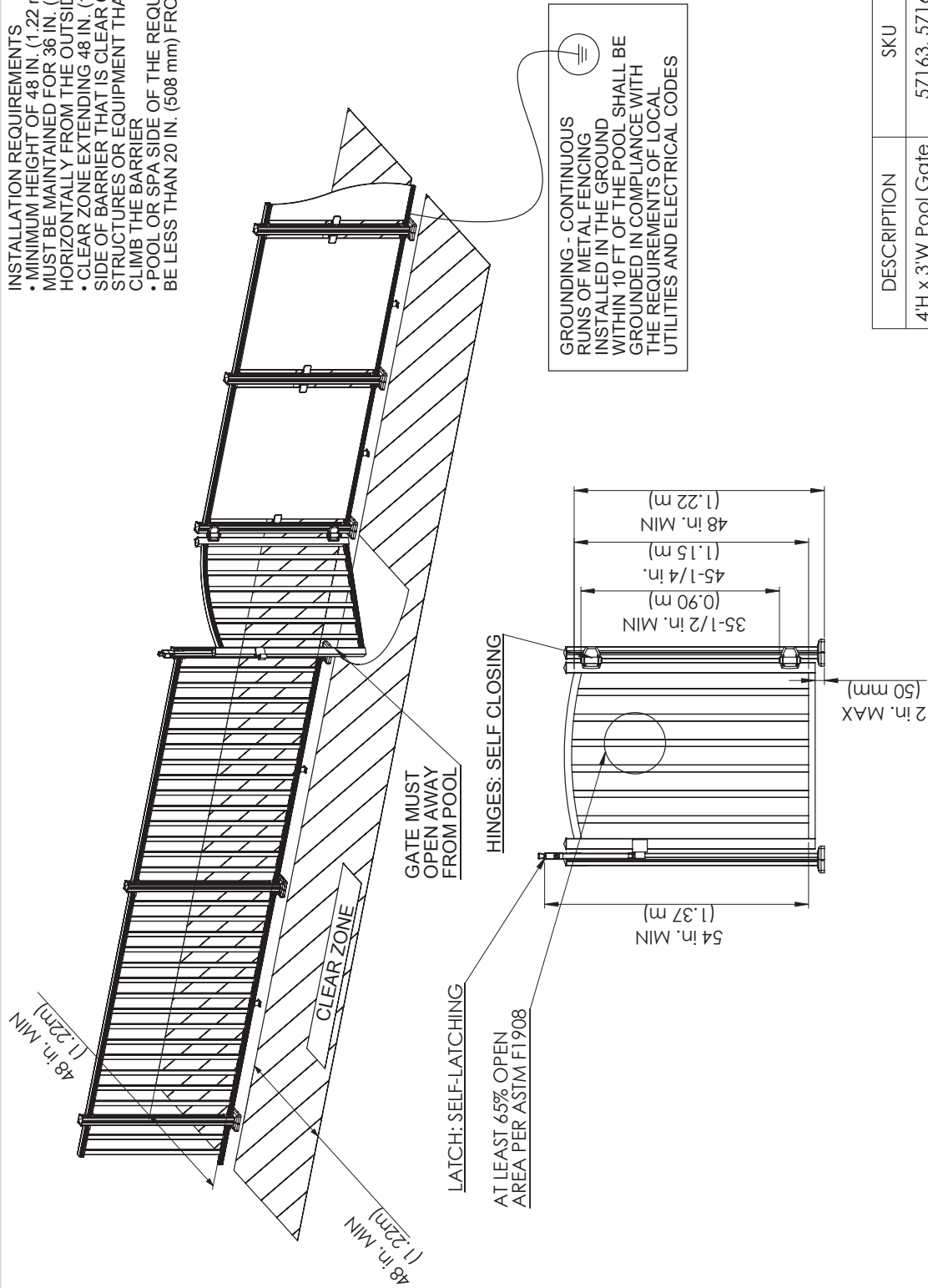
PEAK® ALUMINUM FENCING AQUATINE™ PLUS  
Review for compliance with  
2017 Florida Building Code – Building and Residential  
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Appendix A - Assembly Drawings



		TITLE	AQUATINE™ PLUS 45" GLASS SECTION
		PART FILE	PFBS1-GLASS-RPT
PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THESE DRAWINGS IS THE SOLE PROPERTY OF THE PEAK GROUP OF COMPANIES. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF THE PEAK GROUP OF COMPANIES IS PROHIBITED.		DWG REV	B
		DIMENSIONS ARE IN MM UNLESS NOTED DO NOT SCALE DRAWING	
DESCRIPTION	SKU		
4' Post - Hard Surface	57003, 57004		
45" Glass Rail Kit	57101, 57102		
4'H x 42" Glass Panel	57861		
Glass Bracket Kit	57921, 57922		
Glass Angle Bracket Kit	57931, 57932		
SIZE	DWG. NO.		
<b>B</b>	PFBS1-GLASS-RPT		
SCALE: 1:10	SHEET NO.	2015-03-03-A	SHEET 3 OF 4

PEAK® ALUMINUM FENCING AQUATINE™ PLUS  
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2017 Florida Building Code – Building and Residential  
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Appendix A - Assembly Drawings

- INSTALLATION REQUIREMENTS**
- MINIMUM HEIGHT OF 48 IN. (1.22 m) ABOVE GRADE MUST BE MAINTAINED FOR 36 IN. (915 mm) HORIZONTALLY FROM THE OUTSIDE OF THE BARRIER
  - CLEAR ZONE EXTENDING 48 IN. (1.22 m) FROM EACH SIDE OF BARRIER THAT IS CLEAR OF ANY PERMANENT STRUCTURES OR EQUIPMENT THAT COULD BE USED TO CLIMB THE BARRIER
  - POOL OR SPA SIDE OF THE REQUIRED BARRIER SHALL NOT BE LESS THAN 20 IN. (508 mm) FROM WATER'S EDGE



GROUNDING - CONTINUOUS RUNS OF METAL FENCING INSTALLED IN THE GROUND WITHIN 10 FT OF THE POOL SHALL BE GROUNDED IN COMPLIANCE WITH THE REQUIREMENTS OF LOCAL UTILITIES AND ELECTRICAL CODES

<b>PEAK</b>
TITLE AQUATINE™ PLUS Fence and Gate Layout Requirements
PART FILE Gate and fence layout straight-4ft
DWG REV A
DIMENSIONS ARE IN MM UNLESS NOTED DO NOT SCALE DRAWING
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SIZE <b>B</b>	DWG. NO. Gate and fence layout straight-4ft
DESCRIPTION 4'H x 3'W Pool Gate	SKU 57163, 57164
SCALE: 1:100 2015-03-03-A SHEET 4 OF 4	

**APPENDIX B**  
INTERPRETATION OF  
FBC AND FRC CLAUSES

## **APPENDIX B - INTERPRETATION OF FBC AND FRC CLAUSES**

The following paragraphs describe the latch requirements for pool fences as described in the FBC and the FRC. Included are excerpts from the FBC, the FRC and the ISPSC for reference.

### **Florida Building Code Clause 454.2.17.1.8:**

Access gates, when provided, shall be self-closing and shall comply with the requirements of Sections 454.2.17.1.1 through 454.2.17.1.7 and shall be equipped with a self-latching locking device located on the pool side of the gate. Where the device release is located no less than 54 inches (1372 mm) from the bottom of the gate, the device release mechanism may be located on either side of the gate and so placed that it cannot be reached by a young child over the top or through any opening or gap from the outside. Gates that provide access to the swimming pool must open outward away from the pool. The gates and barrier shall have no opening greater than 1/2 inch (12.7 mm) within 18 inches (457 mm) of the release mechanism.

### **Florida Building Code-Residential Clause R4501.17.1.8:**

Access gates, when provided, shall be self-closing and shall comply with the requirements of Sections R4501.17.1.1 through R4501.17.1.7 and shall be equipped with a self-latching locking device located on the pool side of the gate. Where the device release is located no less than 54 inches (1372 mm) from the bottom of the gate, the device release mechanism may be located on either side of the gate and so placed that it cannot be reached by a young child over the top or through any opening or gap from the outside. Gates that provide access to the swimming pool must open outward away from the pool. The gates and barrier shall have no opening greater than 1/2 inch (12.7 mm) within 18 inches (457 mm) of the release mechanism.

### **RJC Interpretation of above FBC and FRC clauses:**

FBC Clause 454.2.17.1.8 and FRC Clause R4501.17.1.8 have been interpreted in this report to mean that when the latch is located not less than 54" from the bottom of the gate, there is no requirement for the latch to be 18" away from any openings greater than 0.5". Where the latch is not less than 54" from the bottom of the gate, the latch may be placed on either side of the gate, thereby obviating the requirement to prevent a young child from reaching the latch through the barrier. When the latch is located less than 54" from the bottom of the gate, it should be located 18" away from openings greater than 0.5". This interpretation is consistent with the language in 2018 ISPSC Clause 305.3.3.

### **International Swimming Pool and Spa Code Clause 305.3.3**

Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) from grade, the release mechanism shall be located on the pool or spa side of the gate not less than 3 inches (76 mm) below the top of the gate, and the gate and barrier shall not have openings greater than ½ inch (12.7 mm) within 18 inches (457 mm) of the release mechanism.