



Qualifications to Rescreen Enclosures in Palm Beach County

Examining the necessity to require a contractor's license

A White Paper prepared jointly by members of the Alliance of Florida Contractors (AFC) & the Aluminum Association of Florida (AAF)

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Page 87 Architect & Engineering Guide, May 2003, Fastenal Company	

Introduction

This paper presents the aluminum specialties contractorsøperspective on the current licensing requirements for rescreening enclosures in Palm Beach County. It reviews the past and present state of the enclosure industry. More specifically, it proposes that Palm Beach County amend its rules to require an Aluminum Specialties, or equivalent, contractorøs license to rescreen enclosures.

Current licensing requirements to rescreen enclosures in Palm Beach County

Presently, Palm Beach County only requires an occupational license (i.e. business tax receipt) to rescreen enclosures. A contractor¢ license is not a prerequisite for rescreening in this county. The occupational license is relatively easy to obtain and doesn¢ require any verification of proficiency. The applicant can establish a corporation, obtain a worker¢ compensation exemption, and then it is generally just a matter of paying a small fee to obtain an occupational license for rescreening.

Impact recent hurricanes have had on industry

Hurricanes Andrew, Charley, Jeanne, Frances, and Wilma have had profound impacts on the design and construction of screen enclosures in Florida. Each hurricane caused catastrophic failures, which has resulted in successive constrictions on standards. Codes have been modified to require stronger members and connections, and engineering methodologies for evaluating loads and capacities have evolved. The net result is that lateral bracing is being utilized in the construction of screen enclosures that wasnot present a decade ago.

Structural evolution of screen enclosures

Inadequate lateral support caused an inordinate number of screen enclosure failures. As a consequence of this realization, lateral bracing must now be incorporated into almost every screen enclosure installed in Palm Beach County. This additional bracing is required to sustain enclosures against horizontal loads imposed by substantial wind forces.

K-braces and approved cable sets are being used in sidewalls and diagonal angle members are being employed in roofs to resist lateral forces. All of these lateral braces are externally attached with self-drilling screws. These fasteners must be removed to facilitate rescreening (photographic examples of k-brace and approved cable set connections are located in Appendix page 7).

Approved cable sets use an aluminum plate that attaches to an enclosure with nine (9) self-drilling screws. Previously, cable sets were attached with an eye bolt that penetrated a perimeter member. These connections were notorious for prematurely failing. The eye bolt easily rips through the thin sidewall of the member they penetrate.

Inconsistencies in current licensing requirements

Palm Beach County enacted the Aluminum Specialties Contractor license (Appendix page 8) which is comparable to the State Specialty Structure license (Appendix pages 9-10). The County requires that anyone engaging in the construction or repair of screen enclosures must obtain either of the two contractors license or a division 1 license. Additionally, permits are necessary for all construction work and any repair that exceeds \$1,000 in value. In contrast, rescreeners are not required to obtain any form of contractors license or apply for permits. Rescreening a typical enclosure cost far in excess of \$1,000.

Infringement on specialty contractor's license

Both Palm Beach County and the State rule provide, inter alia, that their specialty contractor license is applicable of the execution of contracts requiring the experience, knowledge, and skill necessary for the i installation, repair [and] servicing in the aluminum and fiberglass screening construction materials (Appendix page 8, §(A) and page 9, §(2)(a)). Thus, the replace of fiberglass screening is already encompassed in the definitions of these contractor licenses.

The State® rule is more explicit on the subject, in that it specifically addresses replacement and defines its scope by oconstruction materialsö. The County® rule references omaterial construction tradeö. Nevertheless, it would be untenable to contend that the County® rule doesnøt also encompass rescreening in light of its breadth.

Accordingly, a contractor is currently required to rescreen enclosures to comport with existing construction licensing rules. Palm Beach County has just neglected to enforce them.

Lack of accountability

It is easy to identify a contractor that has legally built or repaired a screen enclosure by researching public records. No such mechanism exists to identify who rescreened an enclosure. Presently, a permit isnot even issued for such work. Superficially, it might not appear to be a problem, but it is.

A screen enclosure structural integrity can be compromised by inadequately trained rescreeners. An enclosure is dependant upon all of its members and connections performing to their original specifications. Self-drilling screws must be removed to take off k-brace cover plates, cable set attachment plates, and angle lateral braces to rescreen. A determination has to be made as to whether the same fasteners can be reused when reinstalling these parts. Galvanic corrosion frequently occurs between the aluminum members and the steel fasteners which causes enlargement of the holes. Additionally, care must be exercised to avoid overdriving the self-drilling screws to avoid stripout of the base metal (see Appendix page 12, Installation Guidelines). This is particularly problematic when reinstalling self-drill screws because they redrill and re-tap the same holes.

Rescreeners can inadvertently overstress an enclosure by installing inappropriate material. Enclosures are generally designed to withstand the wind loads imposed by 18/14 fiberglass screen. Materials such as 20/20 fiberglass screen and Florida Glass have significantly greater wind resistance which can cause premature failure.

Palm Beach County customers have little recourse against today rescreeners when they are negligent. Rescreeners aren required to demonstrate financial stability or obtain public liability or property damage insurance. These are all prerequisites to obtaining a contractor license.

Recommend requiring contractor's license to rescreen

Mandating a contractor is license to rescreen enclosures solves numerous problems. It provides customers with some assurance that the work will be properly performed by trained and responsible parties. It also resolves the conflict with existing licensing rules.

Implementation

Precedent has already been established by another county confronted with the same issues. Pinellas County now requires a specialty contractor license to rescreen enclosures (see Appendix page 11). Their notice explains that they made the change to comport and be consistent with the State Specialty Structure Contractor license.

Palm Beach County should amend its rules and notify current holders of occupational licenses listing rescreening that they must immediately obtain an Aluminum Specialties Contractor's license to continue in said trade. Pinellas County's notice should be used as a guide. It provides a concise explanation for the change and apprises recipients of their obligations and potential penalties for failure to comply.

Conclusion

The requested change will undoubtedly inconvenience existing rescreeners, but the change is a necessary transition. The inordinate devastation of enclosures has unequivocally demonstrated that numerous changes must be implemented to avoid endless repetitions of the same catastrophes.

Updating the licensing requirements for rescreening wonot resolve all the problems with the product, but it is another of many steps in the right direction. Consumers and insurance companies have paid dearly for prior lapses. As a result, many insurance companies dropped coverage and the demand for enclosures has diminished.

Respectability and accountability need to be impose. It is in the consumerøs and the Countyøs best interest to immediately implement the necessary measures to require an Aluminum Specialties Contractorøs license to rescreen enclosures.

Appendix

K-Brace connection



Approved cable set connections



CONSTRUCTION INDUSTRY LICENSING BOARD OF PALM BEACH COUNTY

SPECIALTY CONTRACTOR STANDARDS

ALUMINUM SPECIALTIES CONTRACTOR:

- (A) Aluminum Specialties Contractors are those whose services are limited to the execution of contracts requiring the experience, knowledge, and skill necessary for the fabrication, assembling, handling, erection, installation, dismantling, adjustment, alteration, repair, servicing, and design work when not prohibited by law, in accordance with accepted engineering data and/or according to manufacturers specifications in the aluminum metal, vinyl and fiberglass screening material construction trade.
- (B) The scope of such work shall include and be limited to screened porches, screened enclosures, pool enclosures, preformed panel-post beam roofs, mobile home panel roof-overs, residential glass window enclosures, vinyl panel window enclosures, single story self-contained aluminum utility storage structures (not to exceed 500 sq. ft.), siding, soffit, fascia, or gutters on a commercial building or multi-family residences (excluding single family residences), hurricane shutters, awnings, railings, decorative metals and aluminum fences. (Rev. 1/01/06)
- (C) The scope of such work shall include masonry concrete work and be limited to foundations, slabs and block kneewalls not to exceed six (6) feet on a zero lot line property, incidental to the aluminum and allied materials construction work. The aluminum specialties contractor, whose services are limited, shall not perform any work that alters the structural integrity of the building including, but not limited to, roof trusses, lintels, load bearing walls and foundations. Aluminum specialties contractors shall subcontract to a licensed qualified contractor in the field concerned, all other work specified herein as being the exclusive work of a plumbing, electrical and mechanical contractor. (Rev. 1/01/06)

FLORIDA ADMINISTRATIVE CODE

61G4-15.015 Certification of Specialty Structure Contractors.

- (1) Scope of Rule. The purpose of this rule is to provide for the certification of specialty structure contractors.
- (2) Definition.
- (a) "Specialty Structure Contractor" is a contractor whose services are limited to the execution of contracts requiring the experience, knowledge and skill necessary for the fabrication, assembling, handling, erection, installation, replacement, dismantling, adjustment, alteration, repair, servicing and design work when not prohibited by law, in accordance with accepted engineering data and/or according to manufacturers specifications in the aluminum, metal, canvas, vinyl and fiberglass screening, doors and windows, hurricane protection devices and allied construction materials.
- (b) The scope of such work shall include and be limited to fabric coverings on metal substructures, screened porches, screened enclosures, pool enclosures, preformed panelpost and beam roofs, manufactured housing roof-overs, vinyl or acrylic panel window enclosures, guardrails, handrails, aluminum and vinyl fences, the installation or replacement of windstorm protective devices, single story self-contained aluminum utility storage structures (not to exceed 720 sq. ft.), residential glass window and door enclosures, sunrooms, siding, soffit, fascia and gutters. The installation or replacement of window and door assemblies certified in accordance with AAMA 101/ I.S.2 or Miami Dade TAS 201. 202. 203 as specified by the Florida Building Code in Group R occupancy buildings, as defined by the Florida Building Code, up to three stories or thirty feet in height. The installation or replacement of windstorm protective devices, except for impact resistant glazing, shall be unlimited. Division I Contractors shall be permitted to subcontract with Specialty Structure Contractors for the installation or replacement of window and door assemblies certified in accordance with AAMA 101/ I.S.2 or Miami Dade TAS 201. 202. 203 as specified by the Florida Building Code in buildings of Group R occupancy, as defined by the Florida Building Code, of any height. The scope of such work shall include wood work incidental to the aluminum and allied materials construction work. It shall be limited to the construction of wood framing for the walls of uninhabitable utility storage structures, raised wood decks for enclosures, and the repair and/or replacement of wood incidental to the installation of glass windows and doors, installation of siding, soffit, fascia, gutters and preformed panel-post and beam roofs. The scope of such work shall comply with all plans, specifications, codes, laws and regulations applicable.
- (c) The scope of such work shall include masonry concrete work and be limited to foundations, slabs and block kneewalls incidental to the aluminum and allied construction materials construction work. The specialty structure contractor, whose services are limited, shall not perform any work that alters the structural integrity of the building including but not limited to roof trusses, lintels, load bearing walls and foundations.
- (d) The specialty structure contractor shall subcontract, with a licensed qualified contractor in the field concerned, all other work incidental to that which is defined herein but which is the work of a trade other than that of a specialty structure contractor.

Nothing in this definition shall be construed to limit or infringe upon the scope of work of any specialty contractor certified pursuant to Sections 489.105(3) and 489.113(6), F.S.

- (3) Certification Procedures.
- (a) Qualifications.
- 1. Any person who desires to become a certified specialty structure contractor shall apply to the Construction Industry Licensing Board of the Department of Business and Professional Regulation in writing to take the certification examination.
- 2. A person shall be entitled to take the certification examination if the person:
- a. Is eighteen (18) years of age;
- b. Is of good moral character; and
- c. Meets eligibility requirements according to one of the criteria established in Section 489.111(2)(c)1., 2. or 3., F.S.
- (b) Other Certification Procedures and Fees. Other certification procedures and fees for certified specialty structure contractors shall be the same as those provided for the certification of other contractors as defined in Part I, Chapter 489, F.S. The amount of liability insurance required for specialty structure contractors shall be as follows: \$100,000.00 public liability insurance and \$25,000.00 property damage insurance.

Specific Authority: 489.129(3) FS. Law Implemented 489.129(3) FS. History—New 2-7-83, Formerly 21E-15.14, 21E-15.014. - 120.53, 489.113(6), 489.115(4) FS. Law Implemented 120.53, 489.113(6), 489.115(4) FS. History—New 7-1-87, Amended 1-26-88, 5-23-89, 6-25-89, 4-16-92, Formerly 21E-15.015, Amended 10-31-96, 4-12-04.



Important Notice Regarding Licensing for Rescreening

The Pinellas County Construction Licensing Board is changing all Aluminum Contractor's licenses and scope of work to be consistent with the State's Specialty Structure Contractor's license effective 10/1/04.

The definition of a Specialty Structure Contractor includes the fabrication, assembling, handling, erection, installation, replacement, dismantling, adjustment, alteration, repair, servicing and design work of aluminum, metal, canvas, vinyl and fiberglass screening, doors and windows, hurricane protection devices and allied construction materials, including screen porches, screen enclosures, pool enclosures and more.

Performance of any of the work defined above, within Pinellas County, requires a Specialty Structure Contractors license! Violations of this law will subject those involved to a \$500.00 citation per violation.

Strict enforcement is scheduled to begin 10/1/04.

If you have questions, call the PCCLB at 536-4720!

SELF-DRILLING SCREWS

Decimal Equivalents for Standard Sheet Gauges

Gauge	Steel	Galvanized	Stainless	Aluminum	Steel
No.	Sheet	Sheets	Steel Sheets	Sheets	Tubing
	Manufacturers	Galvanized	United States	American or	Birmingham
	Standard	Sheet Gauge	Standard	Brown & Sharpe	Wire Gauge
0000				0.4600	0.454
000				0.4096	0.425
00				0.3648	0.380
0				0.3249	0.340
1				0.2893	0.300
2				0.2576	0.284
3	0.2391			0.2294	0.259
4	0.2242			0.2043	0.238
5	0.2092			0.1819	0.220
6	0.1943			0.1620	0.203
7	0.1793			0.1443	0.180
8	0.1644	0.1681	0.172	0.1285	0.165
9	0.1495	0.1532	0.156	0.1144	0.148
10	0.1345	0.1382	0.141	0.1019	0.134
11	0.1196	0.1233	0.125	0.0907	0.120
12	0.1046	0.1084	0.109	0.0808	0.109
13	0.0897	0.0934	0.094	0.0720	0.095
14	0.0747	0.0785	0.078	0.0641	0.083
15	0.0673	0.0710	0.070	0.0571	0.072
16	0.0598	0.0635	0.063	0.0508	0.065
17	0.0538	0.0575	0.056	0.0453	0.058
18	0.0478	0.0516	0.050	0.0403	0.049
19	0.0418	0.0456	0.044	0.0359	0.042
20	0.0359	0.0396	0.038	0.0320	0.035
21	0.0329	0.0366	0.034	0.0285	0.032
22	0.0299	0.0336	0.031	0.0253	0.028
23	0.0269	0.0306	0.028	0.0226	0.025
24	0.0239	0.0276	0.025	0.0201	0.022
25	0.0209	0.0247	0.022	0.0179	0.020
26	0.0179	0.0217	0.019	0.0159	0.018
27	0.0149	0.0202	0.017	0.0142	0.016

Notes

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#8 Diameter - Light Gauge - Zinc Finish

Part i	Vumber				
Pan Head	Hex		Drill	Drill & Tap	Max. Material
Phillips	Washer Head	Description	Point	Capacity (in.)	Attachments (in.)
32004	32028	8-18 x 1/2	#2	0.036 - 0.100	0.205
32005	23029	8-18 x 5/8	#2	0.036 - 0.100	0.330
32006	32030	8-18 x 3/4	#2	0.036 - 0.100	0.455
32007	32031	8-18 x 1	#2	0.036 - 0.100	0.705

#10 Diameter - Light to Medium Gauge - Climaseal" Finish

Part N	umber				
Pan Head	Hex		Drill	Drill & Tap	Max. Material
Phillips	Washer Head	Description	Point	Capacity (in.)	Attachments (in.)
32010	32035	10-16 x 1/2	#3	0.036 - 0.175	0.150
32011	32036	10-16 x 5/8	#3	0.036 - 0.175	0.200
32012	32037	10-16 x 3/4	#3	0.036 - 0.175	0.325
32013	32038	10-16 x 1	#3	0.036 - 0.175	0.575
	32039	10-16 x 1-1/4	#3	0.036 - 0.175	0.825
	32040	10-16 x 1-1/2	#3	0.036 - 0.175	1.075

#12 Diameter - Medium Gauge - Climaseal™ Finish

# 12 Diameter - Medium Gauge - Cilmascar Fillish				
Hex Washer		Drill	Drill & Tap	Max. Material
Head Part No.	Description	Point	Capacity (in.)	Attachments (in.)
32041	12-14 x 3/4	#3	0.036 - 0.210	0.290
32042	12-14 x 1	#3	0.036 - 0.210	0.525
32055	12-14 x 1-1/4	#2	0.036 - 0.210	0.580
32043	12-14 x 1-1/2	#2	0.036 - 0.210	0.980
32044	12-14 x 2	#3	0.036 - 0.210	1.525
32053	12-14 x 3	#3	0.036 - 0.210	2.525
32054	12-14 x 4	#3	0.036 - 0.210	3.425

Nominal Screw Sizes

Nominal	Basic	
Screw	Diameter	
Size	(in.)	
6	0.138	
8	0.164	
10	0.190	
12	0.216	
1/4	0.250	

Installation Guidelines

- Use a standard screwgun with a depth sensitive nosepiece to install fasteners. For optimal fastener performance, the screwgun should be a minimum of 4 amps and have a range of 0-2000 RPM.
- Adjust the screwgun nosepiece to properly seat fastener.
- New magnetic sockets must be correctly set before use.
- · Worn or damaged bit tip should be replaced
- · Remove chip build-up as needed.
- For non-bonded or integral washer fasteners, the fastener is fully seated when the head is flush with the work surface.
- The following illustrates a properly seated bonded or integral washer fastener.
- Overdriving may result in torsional failure of the fastener or stripout of the base material.
- The fastener must penetrate beyond the metal structure a minimum of 3 pitches of thread
- All "winged" fasteners must be driven into 16 gauge minimum steel thickness to consistently break wings.

Uses

HVAC, electrical trim accessories to steel framing, stitch roof deck and wall panel sidelaps, residential steel frame construction, brick ties to steel framing, track to stud, stud splicing and hat channel to stud.

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lises

Duct work, roof deck, clips or accessories to steel framing, wall panel to girt and retrofit framing.