RS&H

10748 Deerwood Park Blvd South
Jacksonville, FL 32256

O 904-256-2500
F 904-256-2501
rsandh.com

November 27, 2018

EE Reed
ATTN: Troy Meeks, Project Manager
7505 Waters Ave, Suite B8
Savannah, GA 31406

RE: Savannah Jumbo GA FIS – PCO #15 Conclusion $40,136.00

Dear Troy,
In review of the supporting documents provided by EE Reed, the cost of this change order is associated with the labor and materials to add a thermal barrier to this project. The thermal barrier is required by code and was not specified.

Respectfully,

Project Manager

E.E. Reed Construction, L.P. Pricing Sheet

PCO# 15

PROJECT: Jumbo GA FIS

DATE: November 9, 2018

SUBJECT: Add DC 315 to the Underside of Closed Cell Foam

Days Requested due to additional work and schedule delay on framing ceilings (10 days)

NO.	DESCRIPTION	QUANTITY		LABOR		MATERIAL		SUBCONTRACT		TOTAL
				UN.	AMOUNT	UN.	AMOUNT	UN.	AMOUNT	
1	Add DC 315 to bottom of foam layer	1	LS					34,250	$34,250	$34,250
2										
3										
4										
5										

SUBTOTAL									$34,250	$34,250
TAXES	8.00%									
WORKMENS COMP.	36.00%									
SUBTOTAL										$34,250
INSURANCE	0.72%									$245
BUILDER'S RISK	0.60%									$206
SUBTOTAL										$34,700
FEE	15.00%									$5,205
SUBTOTAL										$39,905
Bond	0.577%									$230
TOTAL										$40,136

E.E. Reed Construction, L.P. / Southeast
7505 Waters Avenue, Suite #B8
Savannah, GA 31406
Phone (757) 761-7050

iFoam, LLC
1390 Highway 82, ByPass East

Prattville, AL 36067

Bid Due: 11/14/2017 1:30:00 PM

Bid Submitted: 11/8/2018 3:00:00 PM

PRICE QUOTATION

CUSTOMER:	E.E. Reed Construction, L.P.
ADDRESS:	3076 Centreville Road, Suite 210, Herndon, VA 20170
CONTACT:	David Freitas Troy Meeks C:912-531-1654
TELEPHONE:	757-761-7050
EMAIL:	DFreitas@eereed.com
JOB LOCATION:	400 Airways Avenue, Savannah, GA 31408
BID NAME:	Jumbo GA CHANGE ORDER-2 DC315 (E.E. Reed)

SPECIFICATIONS:

This Change Order-2 addresses the need to apply 20 Wet Mils of DC315 as a thermal barrier to the Underside of the Corrugated Sloped Roof Deck and represents the additional cost only for material and labor to apply the DC315 to the corrugated sloped roof deck as specified in Table-1 below.

Table-1 Specifications

SURFACE	MATERIAL	R-VALUE	COMMENTS
Exterior Roof	Thermal Barrier 20 Wet Mils	N/A	Underside of Corrugated Sloped Roof Deck

Table-2 Terms and Conditions

TERMS	CONDITIONS
1 - CONTRACT TERMS:	E.E. Reed Construction, L.P. final contract terms as agreed to by and between general contractor and iFoam, LLC.
2 - MOBILIZATION CHARGE	iFoam, LLC includes one Initial Mobilization Charge in the Price Quotation. A Mobilization Charge of $4,000 Per Mobilization is required for mobilizations over and above the Initial Mobilization Charge.
3 - NOT INCLUDED:	iFoam, LLC did not include the application of intumescent paint or DC 315 thermal barrier because all occupied spaces indicated in the plans and specifications are separated from spray foam by gypsum board.
4 - WORK SPACE	iFoam, LLC requires that all work areas remain clear of obstructions during the period in which work is being performed. Other trades are not allowed to be in the areas where spray foam work is being performed because the air quality is adversely affected during the process of the application of spray foam and for a period of time after completion while the spray foam is setting up.
5 - WORK HOURS	iFoam, LLC requires no restrictions on work hours allowing spray foam applicators to work on any day of the week and to start work at any hour and stop work at any hour. In the event that work hours are restricted to specific days of the week and/or to specific start times and/or stop times resulting in an increased number of contiguous elapsed days to complete the job then an additional charge of $1,000/Day will be applied to invoices covering the affected work periods.

iFoam, LLC
1390 Highway 82, ByPass East

Prattville, AL 36067

Bid Due: 11/14/2017 1:30:00 PM

Bid Submitted: 11/8/2018 3:00:00 PM

PRICE QUOTATION:

The price for material, labor, tools, and equipment is **$34,250.00**.

CONTACT INFORMATION:

COMPANY NAME:	iFoam, LLC
ADDRESS:	1390 Highway 82, ByPass East
CITY, STATE ZIP CODE:	Prattville, AL 36067
MAIN CONTACT:	Jonathan Roll
EMAIL:	Jonathan@SprayiFoam.com
CELL:	334-318-3625
OFFICE:	334-380-9550
FAX:	Not Assigned

APPROVALS:

REPRESENTATIVE:	_____
	Jonathan Roll
DATE:	_____
	MM/DD/YYYY
REPRESENTATIVE:	_____
	David Freitas Troy Meeks C:912-531-1654
DATE:	_____
	MM/DD/YYYY

Paint to Protect ™

International Fireproof Technology, Inc.

17528 Von Karman Ave. Irvine, CA 92614

Product Name:	DC 315 Fireproof Paint for Foam
Name of Company:	International Fireproof Technology, Inc.
Brand:	Paint to Protect ™
Address:	17528 Von Karman Ave. Irvine, Ca. 92614
Phone:	949.975.8588
Chemtrec Emergency No:	800-424-9300
Web Site:	www.painttoprotect.com
Email:	ptp@painttoprotect.com

Characteristics

Finish:	Flat
Color:	Off-White, Special orders DC 315 is available in gray
V.O.C.:	(47 g/l)
Volume Solids:	67%
Drying Time:	@ 77°F & 50% RH to touch 1-2 hours to recoat 2 to 4 hours
Type of Cure:	Coalescence
Flash Point:	None
Reducer/Cleaner:	Water
Shelf Life:	2 years (unopened)
Packaging:	5 & 55 gallon containers
Shipping weight:	5 gallon pail - 58 lbs. 55 gallon drum - 640 lbs.
Application:	Brush, roller, conventional and airless spray

Surface Preparation:

All surfaces to be painted must be clean, cured, firm, dry and free of dust, dirt, oil, wax, grease, mildew, and efflorescence. The quality of any paint job is only as good as the surface preparation that precedes the paint application. Our coating has excellent bonding characteristics and will adhere to most sound, clean, foam surfaces. Make sure the surface of the foam is free of gouges, holes, exposed cells, and that the surface is stable and not crumbling or deteriorated. If any such defects are found, repair them prior to proceeding.

Mildew: should be removed by scrubbing with a 25% solution of household bleach water. Tri-sodium phosphate (TSP) or common laundry powder such as Tide may be added to solution to assist removal.

Efflorescence: is a white powdery alkaline crystal growth sometimes found on plaster or masonry walls. It is a condition caused by excessive moisture in the walls forcing alkaline salts to the surface of the wall. Efflorescence must be removed and neutralized with an acidic solution (white vinegar works well).

Caution: The presence of efflorescence indicates that a moisture problem has occurred behind the wall at some point in time. If the source of excessive moisture is not corrected, the efflorescence will return and push any coating, including ours, off the wall.

Temperature: **DC 315** is water based coating which will freeze and become unusable at temperatures below 32° F. PROTECT FROM FREEZING DURING SHIPMENT AND STORAGE. Do not store material at temperatures below 50° F. Do not apply **DC 315** when ambient air and substrate temperatures fall below 50° F. Store at 50° F to 80° F.

Important: Humidity 65% and higher must use fans to move air for curing. High humidity may require longer cure times.

Material Preparation:

DC315 Fireproof Paint must be thoroughly mixed before application. Failure to do so will seriously compromise our coating's ability to perform. We recommend mechanical stirring with a high speed drill and a paddle appropriate for the size container you are working from. Contents should be stirred from the bottom up, making sure to scrape the bottom and sides with a paint stick as you go. Contents should be stirred to a creamy consistency with no lumps. Thinning is usually not needed. If paint has been exposed to high heat, water may evaporate from the plastic 5 gallon container. If the paint level is below 3 inches from the top of the container, add enough water to bring the level back up to within 3 inches from the top in order to ensure proper consistency.

DC315 is a water based product and slight thinning will not hurt the product, however, thinning increases the likelihood of not applying the proper thickness of paint, thus diminishing our product's fire proofing ability. Ultimately, it is your responsibility to make sure that the proper thickness of material has been applied so our product can do its job. Except for tinting with universal paint tint, never mix our product with other materials.

Cold Storage: Before applying DC 315 in cold storage please review pre-application check list. It is important that all wall and ceiling surfaces must clean and dry. Application and curing temperatures must be above 50º F and rising. Curing time is 7-11 days high humidity may require longer cure time.
Please be aware that condensation will occur in cold storage rooms when the temperature is warmer outside and the door is left open. When this happens moisture will form on the wall and ceiling surfaces. This will affect proper adhesion and performance of DC 315 if substrate is not dried before applying. **DC 315 is not washable.**

Freezer: Before applying DC 315 in freezers please review pre-application check list. It is important that wall and ceiling surfaces be completely clean and dry. The temperature of substrate needs to be above 50º F degrees. Application and curing temperatures must be minimum 50º F and rising. Curing time takes 7-11 days. To reduce cure time too approximately 5 days add fans for air movement and heaters. DC 315 is a water-base product and if the coating is not completely cured it will freeze and affect proper adhesion. **DC 315 is not washable.**

Humidity: Humidity 65% and high must place fans to circulate air so moisture will not develop on walls and ceiling, if walls are not dry before applying DC 315, this will affect proper adhesion and performance. High humidity may require longer cure times.

Testing:

- UL 1715 - Thermal Barrier
- NFPA-286 - Contribution to Room Combustibility
- ASTM E 84
- CAL 1350
- NSF/ANS1 51 Incidental Food Contact, USDA approved for ceiling, **DC 315 is not washable.**

Application Equipment:

DC 315 can be applied by brush, roller or airless sprayer.
Brushing: Use top quality polyester/nylon blend brushes such as those supplied by Purdy, Wooster, or equivalent.
Rolling: 3/8" polyester blend nap roller covers generally work well when applying DC 315 by roller.

Spraying:

Airless Spray Minimum:

PSI:	3000 PSI or higher or equivalent
Filter:	30 mesh, removal of filter is recommend from gun and machine
Hose:	1/4" diameter airless spray line for the first 50' from pump and ¼" x 6' whip
Tip:	517 – 531
GPM:	.95

For best results use, Hose: 3/8" diameter airless spray line for the first 50' from pump and ¼" x 6' whip and no filters gun and machine

For Smaller Jobs Residential and Small Warehouses

Pump:	(Titan) 740 Impact or equivalent
PSI:	3300 / 227
GPM:	.80
Tip:	517 – 531 or equivalent.
Filter:	30 mesh, removal of filter is recommend from gun and machine
Hose:	1/4" diameter airless spray line for the first 50' from pump and ¼" x 6' whip

Pump:	(Graco) Ultra Max II 795 Hi-Boy or equivalent
PSI:	3300 / 227
GPM:	.95
Tip:	517 – 531 or equivalent.
Filter:	30 mesh, removal of filter is recommend from gun and machine
Hose:	1/4" diameter airless spray line for the first 50' from pump and ¼" x 6' whip

Pump:	(SprayTex) GPX 130 or equivalent
PSI:	3300 / 227
GPM:	1.30
Tip:	517 - 531 or equivalent.
Filter:	30 mesh, removal of filter is recommend from gun and machine
Hose:	1/4" diameter airless spray line for the first 50' from pump and ¼" x 6' whip

For Best results: For all Jobs big or small

Pump:	(Graco) Mark 4 or 5 or equivalent
PSI:	3300 / 227
GPM:	1.35
Tip:	517 - 533 or equivalent.
Filter:	30 mesh, removal of filter is recommend from gun and machine
Hose:	3/8” diameter airless spray line for the first 50’ from pump and ¼” x 6’ whip

For 55 gallon Drums

Pump:	(Graco) GH 300 or equivalent
PSI:	3300/ 227
GPM:	3.0 / 11.4
Tip:	517 - 537 or equivalent.
Filter:	30 mesh, removal of filter is recommend from gun and machine
Hose:	3/8” diameter airless spray line for the first 50’ from pump and ¼” x 6’ whip

Pump:	(Graco) GH 833 or equivalent
PSI:	4000/ 276
GPM:	3.0 / 11.4
Tip:	517 - 537 or equivalent.
Filter:	30 mesh, removal of filter is recommend from gun and machine
Hose:	3/8” diameter airless spray line for the first 50’ from pump and ¼” x 6’ whip

See test data for recommendations of mil thickness, or call the manufacturer for technical assistance.

Application Temperatures:

Temperature of substrate and application must be 50º F and rising. 68º to 90º F are recommended temperatures for applying. Do not apply if temperature will fall below 50º within two hours of application. It is the sole responsibility of the applicator to ensure that DC 315 has been applied in accordance with the application directions. Application should not proceed if surface or air temperatures exceed 90º F.

Workmanship:

General: Apply DC 315 fireproof paint according to manufacturer's written instructions. Use applicators and techniques best suited to the type of foam being applied. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to forming a durable paint film. Paint surfaces behind movable equipment and furniture the same as similar exposed surfaces.

Coverage: Check Test report for square feet per gallon and mil thickness. Example at a rate of approximately 20 wet mils @ 80 square feet per gallon application. Dry film thickness (DFT) will be approximately 13 mils. The final (DFT) will vary and depends on the substrate of the specific assembles.

Curing time: 7-11 Days

Cleanup:

- ✓ At the end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
- ✓ After completing painting, clean glass and paint-spattered surfaces.
- ✓ Remove spattered paint by proper methods. Be careful not to scratch or otherwise damage adjacent finished surfaces.
- ✓ Provide "Wet Paint" signs to protect newly painted finishes.
- ✓ After completing painting, remove temporary protective wrappings provided by others to protect their work.

Health & Safety

- ✓ All work carried out under this specification shall be in tradesman-like manner, with due regard to prevention of contamination of the site and associated work.
- ✓ Appropriate steps are to be taken to protect the health and safety of any person who has reason to be on the site.
- ✓ Refer to the governing Health and Safety regulations and minimize the hazards on site by using the proper trade approved equipment and techniques. Ensure supply and appropriate use of protective clothing and equipment.
- ✓ **Lead**: Existing coatings may contain lead. Test surfaces accordingly. All necessary precautions must be taken with existing painted surfaces that contain lead.
- ✓ **Asbestos**: Contractors need to comply with local regulations and guidelines before commencing any work on surfaces and substrates that may contain asbestos.
- ✓ Avoid contact with skin and eyes and avoid breathing of vapors and spray mist. Wear eye protection, dust mask and protective clothing when using. Open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, seek fresh air immediately. Wash thoroughly after handling. Close container after each use.

FIRST AID

- ✓ If swallowed, drink large amounts of water and get medical attention immediately.
- ✓ In case of eye contact flush with plenty of water and consult a physician immediately.

Check List Before You Start

- ✓ **Temperature** Is temperature within limits (60º to 90º F)?
- ✓ **Humidity** Is the relative humidity less than 85%?
- ✓ **Consistency** Are the contents thoroughly mixed?
- ✓ **Surface** Are all substrates clean, dry and sound?
- ✓ **Measurement** Wet film gauge on site?
- ✓ **Safety** Are Health and Safety checks complete?
- ✓ **Need help** Call 949.975.8588
- ✓ Correct spray tips –525 thru 529
- ✓ Airless sprayer with minimum 1.25 GPM

- ✓ Electrical power and at minimum 12 gauge extension cord
- ✓ 30 mesh machine & gun (if applicable) filters
- ✓ Power drill & mixer of appropriate size
- ✓ Drop cloths or poly sheeting
- ✓ Disposable gloves, mask, protective eyewear
- ✓ Clean metal flashing or equivalent for spray (or clean metal flashing)
- ✓ Portable fans to speed drying
- ✓ Space heaters as required to create conditioned space (=>68°f)
- ✓ Disposable paint brushes
- ✓ Work lights for tight areas
- ✓ Scaffolding (as required)
- ✓ Clean-up rags
- ✓ 2 five gallon pails for clean-up
- ✓ Dish detergent for clean-up 1-2 oz.

Measuring Wet Film Thickness

Figure 1

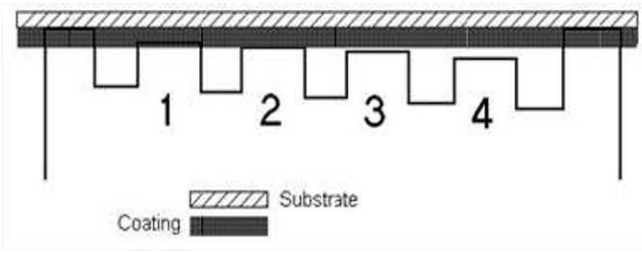

Figure 2

How do I use a wet film thickness (WFT) gauge?

A wet film thickness gauge is designed to give the spray operator immediate feedbacks as to the film build just sprayed. In most cases, measuring the dry film thickness (DFT) provides little information as it is usually measured a considerable amount of time after the actual spraying. Many things could have influenced the DFT: operator fatigue, ambient air temperature, coating temperature, etc.
There are several types of WFT gauges available. The most common being the notch gauge (see figure 1). Others types including the eccentric disk, the rolling notch gauge and the 6 sided gauges are available from specialty vendors.
There are several issues that must be addressed when using a WFT gauge.

- Technique
- Timing
- Reading with clear coats
- Creating surface defects

<u>Technique</u>

- When placing the gauge on a freshly painted part, the gauge must be placed 90 degrees to the part. The operator also needs to be aware of variation of the surface that may influence the reading. For example, if the surface is not perfectly flat, one direction may give a more accurate reading than another.
- To use the WFT gauge, place the gauge directly on the wet finished part (see figure 2) and as described above. The notches will indicate the measured film thickness. For example, if the 1 and 2 mil notches are wet and the 3 and 4 notches are dry, then the measured thickness is between 2 and 3 mils (.002 to .003 inches)

<u>Reading with Clear Coats</u>

- A clear coating on a WFT gauge would be very difficult to read. The most common method of reading clear coats is to use the gauge as a stamp on a piece of absorbent (non-gloss) paper. Many companies use the stamp method as a way of documenting the WFT.

Creating Surface Defects

- After using a WFT gauge to check the film thickness, the material may not flow to hide the area where the gauge was used. If this creates an undesirable defect, place a small sample of the material in line with the operators normal spray path. This sample should be sprayed along with the part. The sample then may be checked for WFT or DFT (after curing)

Wet Mil and Dry Mil:

During Application, the wet film thickness should be checked using a wet film thickness gauge. To use the gauge insert the teeth into the wet DC 315 wet base coat, the last tooth to be coated indicates the thickness achieved. This is very important so you can achieve the required dry film thickness (DFT) of the specific assembly. During the drying process, DC 315 will shrink due to evaporation.

Below Wet Mil Film (WFT) and a Dry Mil Film (DFT) Chart when using DC 315

Wet Mil Film Thickness (WFT) Build Chart

- ✓ 5 Gal @ 4 Mils covers 2000 square feet @ 400 square feet per gallon
- ✓ 5 Gal @ 18 Mils covers 450 square feet @ 90 square feet per gallon
- ✓ 5 Gal @ 20 Mils covers 400 square feet @ 80 square feet per gallon
- ✓ 5 Gal @ 22 Mils covers 365 square feet @ 73 square feet per gallon

Dry Mil Film Thickness (DFT) Build Chart

- ✓ 5 Gal @ 3 Mils covers 2000 square feet @ 400 square feet per gallon
- ✓ 5 Gal @ 12 Mils covers 450 square feet @ 90 square feet per gallon
- ✓ 5 Gal @ 13 Mils covers 400 square feet @ 80 square feet per gallon
- ✓ 5 Gal @ 15 Mils covers 365 square feet @ 73 square feet per gallon