

INTERIOR REGIONAL HOUSING AUTHORITY

REQUEST FOR PROPOSAL

25 February 2010

General Description:

Interior Regional Housing Authority (**IRHA**) is hereby soliciting bids from Manufacturers, Contractors, and Suppliers to provide (1) 1312 SF 3-bedroom Single Family Ranch (including Arctic Entry) Structural Insulated house package as per the floor plan(s) and technical specifications for the required structural insulated panels (attached) until **30 March 2010 at 4:30 P.M. Bid proposals must be received in a sealed envelope, and mailed to: Interior Regional Housing Authority, 828 27th Avenue, Fairbanks, Alaska 99701.** Proposals received after **4:30 P.M. 30 March 2010** will not be accepted.

The proposal(s) should include engineering, shop drawings on an 11" x 17" format size, panel fabrication after review and approval, warranty, and delivery to **Interior Regional Housing Authority's** warehouse @ **828 27th Avenue, Fairbanks, Alaska** for (initial proposal purposes). The **FOB delivery** site may be designated elsewhere, upon a mutually-acceptable equitable Price adjustment for shipping. Also, be it known that after the prevailing bidder is selected, {based on the above-noted one (1) house package}, **Interior Regional Housing Authority** reserves the right to negotiate the award of additional "house panel packages", once the exact sizes and quantities are determined.

Requirements:

Structural panels shall be manufactured per the (attached) "Specifications for Structural Insulated Panels". The Manufacturer/Contractor and/or Supplier shall certify and warrant that the panels will meet the design criteria as prescribed in the specifications and are suitable for the intended application. Acceptable panel systems must be equal to or exceed the specifications attached for a **shot mold injected polyurethane foam core composite panel**, meeting said specification requirements.

One (1) set of preliminary engineered shop drawings for the house plan shall be provided for approval by **Interior Regional Housing Authority {IRHA}** prior to commencement of panel fabrication. Upon **IRHA's** approval, panels shall then be fabricated in accordance to the manufacturer's engineered shop drawings. Three (3) complete sets of Engineered and Sealed shop drawings shall be furnished with each house package.

The above-noted 3-bedroom house package shall consist of and include the following:

1. 6 ½" R-44 Exterior wall panel system (see attached specifications).
2. 6 ½" R-44 gable end panels {for one (1) gable end per house. (continued page 2)

Schedule Date:

All packages shall be inclusive of engineering, shop drawings, panels' fabrication, packaging, warranty and delivery FOB *IRHA*'s warehouse no later than May 1, 2009.

Alaska Native Preference:

It is the policy of *IRHA* to comply with 25 USC 450 (as amended) by giving preference to Alaska Natives to the extent feasible when contracting for services as describe in *IRHA*'s Procurement Policy.

IRHA Payment Terms:

Upon issuance of a Purchase Order, *IRHA* will advance, as a deposit, 50% of the lump sum of the Purchase Order. The remaining balance of the Purchase Order is due and payable upon delivery, receipt, and inspection at *IRHA*'s warehouse.

All RFP "evaluation for award" will be conducted by *IRHA*'s CIPD department following "bid suspension". The "award decision", as made by the CIPD Supervisor, Jorge Simmons, shall be final. By submitting a bid proposal, Contractors hereby release *IRHA* from any further discussion, judgment, and/or litigation once the award is made.

- *Copies of the "Plans" for the 3-bedroom house referenced in this 'Request for Proposal', and/or further information can be obtained from IRHA's offices @ 828 27th Avenue, Fairbanks, Alaska 99701 for bidding purposes. Request same by contacting Paul Snow at (907) 452-8315, extention #131. Documents related to this RFB can be obtained at IRHA offices, 828 27th Avenue, Fairbanks, Alaska 99701.*

cc: Legal
ceh/CEH file

INTERIOR REGIONAL HOUSING AUTHORITY SPECIFICATIONS FOR STRUCTURAL INSULATED PANELS

Substitutions must be equal to, or exceed, the following specifications;

1) Applications

- i) Design to resist design loads as specified in 2006 building code without failure or damage
 - (a) Wind load 20 psi Exposure “A”
 - (b) Snow load 50 psi
 - (c) Seismic D-1

- ii) Walls: Provide panels including finish indicated on drawings.
 - (a) Finish of interior face: 7/16” CDX Exterior Grade Plywood
 - (b) Finish of exterior face: 7/16” CDX Exterior Grade Plywood
 - (c) Length of panel: 8’-0”
 - (d) Thickness of panel: 6-1/2”
 - (e) R-value: R-44

- iii) Floors: Provide panels including finish indicated on drawings.
 - (a) Finish of interior face: 1/2” ACX Plywood (underlayment grade on one side)
 - (b) Finish of exterior face: 7/16” OSB
 - (c) Length of panel: 8’-0”
 - (d) Thickness of panel: 6-1/2”
 - (e) R-value: R-44

2) Materials

- i) Factory manufactured panels shall be shot mold injected polyurethane foam core composite panels, comprised of an exterior (OSB, PWF, Plywood, Drywall, Cement Board) a polyurethane foam core and an interior skin (OSB, PWF, Plywood, Drywall, Cement Board) with corrosion resistant connectors and fasteners

Typical Physical Properties	Value	ASTM Test Methods
Molded Panel, pcf	2.3	ASTM D-1622
Core Density, pcf	2.1	ASTM D-1622
Parallel Compressive Strength @ 10% deflection, psi	34	ASTM D-1621

Parallel Compressive Modulus, psi	1106	ASTM D-1621
Perpendicular Compressive Strength @ 10% deflection, psi	17	ASTM D-1621
Perpendicular Compressive Modulus, psi	506	ASTM D-1621
Flexural Strength, psi	49	ASTM D-790
Tensile Strength, psi	49	ASTM D-1623
Porosity (% Closed Cells)	91	ASTM D-2856
Water Absorption, lbs/ft ²	0.02-0.06	ASTM D-2842
"k" factor, BTU- IN/HR-FT ² -°F		
Initial	0.143	ASTM C-518
Aged 10 days @ 140°F	0.152	ASTM C-518
"R" value, / inch of thickness	6.99	ASTM C-177-85
"R" value aged 10 days @ 140°F	6.57	ASTM C-177-85
Flame Spread*	15	ASTM E-84
E-84 Smoke	285	ASTM E-84

*Substantiated by independent research and ongoing in-plant testing.

1. Faces: Complying with PS2, APA, TECO or approved agency performance rated as Exposure 1
2. No formaldehyde, CFC's, or any other harmful gasses.
3. Nominal panel size: 48" x 96" (1219 mm x 2438 mm)
4. Panel Thickness: 6-1/2" (165.1 mm), with R-value of 44
5. Dimensional Tolerances: 1/8" (3 mm)