SECTION 103100 – MANUFACTURED GAS FIREPLACES

ALL LIBRARIES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Manufactured Indoor Gas Fireplaces.
2. Indoor Gas Log Set.

B. Related Requirements:

1. Section 061000 "Rough Carpentry" for wood blocking and grounds for wall-mounted manufactured fireplaces.

1.3 REFERENCES

A. ANSI Z21.44 – Gas-Fired Gravity and Fan Type Direct Vent Wall Furnaces.

B. ANSI Z21.88 – Vented Gas Fireplace Heaters.

C. Z21.50b – Vented Gas Fireplaces.

D. ANSI Z223.1 – National Fuel Gas Code.

E. CSA 2.22b – Vented Gas Fireplaces.

F. CSA 2.23 – Vented Gas Fireplaces Heaters.

G. CAN/ULC S610 – Factory-Built Fireplaces

H. UL 127 – Standard for Factory-Built Fireplaces.

I. UL 907 – Standard for Fireplace Accessories.

J. UL 1482 – Standard for Safety for Solid-Fuel Type Room Heaters.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product, including:

1. Preparation instructions and recommendations.
2. Storage and handling requirements and recommendations.
3. Installation methods.

B. Shop Drawings: Provide drawing of required clearances, rough-in of enclosure and utilities.

1. Selection Samples: For each finish product specified, two (2) complete sets of color chips representing manufacturer's full range of available colors and finishes.

1.5 INFORMATIONAL SUBMITTALS

A. Qualification Data: For Manufacturer, minimum five (5) year experience manufacturing similar products.

B. Qualification Data: For Installer, minimum two (2) year experience installing similar products.

1.6 PRE-INSTALLATION MEETING

A. At jobsite, convene minimum two (2) weeks prior to starting work for this section.

1.7 QUALITY ASSURANCE

A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer.

1.8 DELIVERY, STORAGE, AND HANDLING

A. Store products in manufacturer's unopened packaging bearing the brand name and manufacturer's identification until ready for installation.

B. Handle materials to avoid damage.

C. Store products in covered area, well protected from weather.

1.9 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

1.10 SEQUENCING

A. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

1.11 WARRANTY

A. Warranty: Provide manufacturer's standard warranty against defects in materials and workmanship.

PART 2 - PRODUCTS

2.1 GAS BURNING MANUFACTURED FIREPLACES

A. Gas burning manufactured fireplace, constructed for outdoor and indoor exposure.

1. Basis-of-Design Product: Subject to compliance with requirements, provide Indoor Horizon HZ33CE Direct Vent Gas Fireplace as manufactured by Regency Fireplace Products, or a comparable product by one of the following:

a. Regency Fireplace Products.
1) Model Number: HZ33CE.

B. General:

1. Comply with applicable building codes.
2. Comply with ANSI Z21.88/CSA 2.33 or Z21.50b/CSA 2.22b.
3. WHI listed.

C. Features:

1. This appliance has been certified for use with natural gas.
2. This appliance is not for use with solid fuels.
3. This appliance is approved for bedroom or bedsitting room installation.
4. The appliance must be properly connected to a venting system.
5. The appliance is not approved for closet or recessed installation.

D. Dimensions Fireplace Unit:

1. Length: 34-9/16 inches (878 mm).
2. Depth: 16 inches (407 mm).
3. Height: 29-1/4 inches (742 mm).

E. Clearances to Combustibles:

1. The combustible area above the facing of the fireplace must not protrude more than ½ inch from the facing. If it does, it is considered a mantel and must meet the mantel requirements.
2. The appliance cannot be installed on a carpet, tile or other combustible material other than wood flooring.
3. If installed on carpet or vinyl flooring, the appliance shall be installed on a metal, wood or noncombustible material panel extending full width and depth of the fireplace.

F. Fuel Type: Natural Gas.

1. Minimum Supply Pressure: 5" W.C. (1.25 kPa).
2. Manifold Pressure – High: 3.5" W.C. (0.87 kPa).
3. Manifold Pressure – Low: 1.6" W.C. (0.41 kPa).
4. Orifice Size – Altitude 0 – 4,500 ft.: #47 DMS.
5. Minimum Input – Altitude 0 – 4,500 ft. (0 – 1372 m): 12,000 BTU/h (3.51 kW).
6. Maximum Input – Altitude 0 – 4,500 ft. (0 – 1372 m): 17,000 BTU/h (4.98 kW).

G. Venting:

1. The fireplace must be vented to the outside.
2. The venting system must never be attached to a chimney serving a separate solid fuel burning appliance.
3. Each gas appliance must use a separate vent system. Do not use common vent systems.
4. Horizontal sections of the vent system require a minimum of 3 inches of clearance to combustibles at the top of the flue and 1 inch clearance at the sides and bottom until the flue penetrates the outside wall.
5. A minimum 1 inch clearance all around the flue is acceptable at this point of penetration.
6. Unless the vertical run is 7-1/2 feet or higher from floor of fireplace, the clearance for horizontal run is 1 inch on all sides.
7. Direct vent – Astro Cap flex venting system.
8. Vent Sizing:

    a. 4 inch by 6-7/8 inch – Flex.
    b. 4 inch by 6-5/8 inch – Rigid.

H. Features:

1. Clean, louverless clean edge face that allows surround materials to be installed to the edges for an elegant, minimal appearance.
2. Driftwood ceramic log set.
3. Rich yellow flames.
4. Remote ready burner system with remote control and wall mounted switch.
5. Concealed yet easily accessible control panel at the front of the unit can be lifted to reveal quick access to the valve and heat controls.
6. Porcelain enamel inner panels reflect the flames, conveying dancing light.
7. Flames from a bed spanning the full length of the fireplace.
8. Reflective Black Enamel Panels.
9. Safety screen.
10. Electronic ignition – with SureFire switch.
11. Heat-Radiating ceramic glass provides clear view of fire while helping to deliver heat to the space.

I. Accessories:

1. Variable speed blower.

J. Control Board:

1. Electronic Ignition.
2. Adjustable flame.
3. Remote control.

2.2 MATERIALS

A. Aluminum: Manufacturer's standard alloy for finish required, with temper to suit forming operations and performance required.

1. Extruded Aluminum: ASTM B 221 (ASTM B 221M).
2. Aluminum Sheet: ASTM B 209 (ASTM B 209M).
3. Aluminum Die Castings: ASTM B 85.

B. Stainless-Steel Sheet: ASTM A 666, Type 302 or Type 304.

C. Stainless-Steel Floor Plate: ASTM A 793, rolled floor plate.

D. Steel Sheet: ASTM A 1008/A 1008M.

E. Steel Tubing or Pipe: ASTM A 500/A 500M.

F. Tempered Glass: ASTM C 1048, Kind FT (fully tempered), Condition A (uncoated), Type I (transparent glass, flat), clear or tinted as indicated.

G. Fasteners: Screws, bolts, inserts, anchorages, and other fastening devices of same material as items being fastened, and of same finish where exposed, except provide stainless-steel fasteners for exterior exposures. Use tamperproof fasteners where exposed to view.

2.3 GENERAL FINISH REQUIREMENTS

A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.

B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

C. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine installation area with Installer present for proper locations of power connections and other conditions affecting performance of manufactured fireplace.

B. If substrate preparation is the responsibility of another Installer, notify Architect of unsatisfactory preparation before proceeding.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

D. Verify proper power supply and fuel source are available.

3.2 PREPARATION

A. Clean surfaces thoroughly prior to installation.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

A. Install in accordance with manufacturer's instructions, ANSI Z21.44 and the requirements of authorities having jurisdiction.

B. Use manufacturer's guidelines for minimum clearances to combustibles, walls, and finishes.

C. Anchor all components firmly in position for long life under hard use.

3.4 FIELD QUALITY CONTROL

A. Upon completion of installation, visually inspect all exposed surfaces. Touch up scratches and abrasions with touch up paint recommended by the manufacturer; make imperfections invisible to the unaided eye from a distance of 5 feet (1.5 m).

B. Test for proper operation, control and safety devices.

3.5 ADJUSTING AND CLEANING

A. Adjust moving components to operate smoothly without binding. Lubricate hardware and other moving parts.

B. Switches: Adjust field-adjustable switches and devices to properly control operation of electrically powered components.

C. Clean soiled surfaces of manufactured fireplace to remove dirt, fingerprints, adhesives, and other foreign materials according to manufacturer's written instructions.

3.6 PROTECTION

A. Protect installed products until completion of project.

B. Touch-up, repair or replace damaged products before Substantial Completion

END OF SECTION 103100