PART 1 - GENERAL

1.1 FOOD SERVICE EQUIPMENT GUIDELINES

A. All equipment shall meet requirements of local Health Department, City and Fire Agencies and DSA and OSHPOD, if required, along with NSF, UL, AGA, ASTM, ANSI and all governing agencies.

B. Equipment to be installed to SMACNA standards, if required. See code compliance if required.

C. Provide Energy Star equipment where available. Design and specification of equipment shall provide any and all opportunities to support LEED Certification of the project.

D. All equipment to carry a minimum One Year Service Warranty in addition to any manufacturers extended warranties. Refrigeration equipment to include 5 Year Compressor Warranty.

E. CUSTOM FABRICATION METAL/APPLICATIONS AND SELECTIONS METALS

1. Stainless Steel shall be standard 18-8, 300 Series, No. 4 finish unless otherwise noted. Gauge requirements are as follows:

U.S.S GAUGE	DECIMAL THICKNESS	MILLIMETER THICKNESS
10	.1406	3.57
12	.1094	2.78
14	.0781	1.98
16	.0625	1.59
18	.0500	1.27
20	.0375	0.95
22	.0312	0.79

2. Galvanized Steel shall be electro-galvanized, continuous line, chemically treated (dry) with regular spangle appearance. Gauge requirements as follows:

U.S.S GAUGE	DECIMAL THICKNESS	MILLIMETER THICKNESS
10	.1382	3.51
12	.1084	2.75
14	.0785	1.99
16	.0635	1.61
18	.0516	1.31
20	.0396	1.01
22	.0336	0.85

3. Brass shall be copper alloy #260, cartridge or equal suitable for application and finish as detailed and indicated in finish schedule or drawings.

F. APPLICATIONS AND SELECTIONS

1. The following gauges, metals and finishes shall apply unless otherwise noted in the specifications or drawings:

DESCRIPTION	GAUGE	METAL	FINISH #
Counter Body:			
a. Framework	14	Galv.	-
b. Aprons, partitions, backs and ends, exposed	18	S/S	4
c. Aprons, partitions, backs and ends, unexposed	18	Galv.	-
d. Shelves	18	S/S	4
e. Refrigerator interiors	20	S/S	2B
Table & Counter Tops	14	S/S	4
Doors:			
a. Outside faces	18	S/S	4
b. Inside faces	20	S/S	2B
Drawer Pans:			
a. Cradle Frame	14	S/S	4
b. Outside Pan	18	S/S	4
c. Inside Pan	20	S/S	4
Ducts:			
a. Grease Exhaust Exposed	18	S/S	4
b. Grease Exhaust Unexposed	16	S/S	-
c. Warewashing	18	S/S	4
Hat Sections & Channels			
a. Unexposed	14	Galv.	-
b. Exposed	14	S/S	4
Ice Pans/Bins			
a. Interior	18	S/S	4
b. Exposed Exterior	18	S/S	4
c. Unexposed exterior	18	Galv.	-
d. Perforated False Bottom	16	S/S	4
Legs & Crossrails, tubing	16	S/S	4
Shelf Brackets:			
a. Exposed	14	S/S	4
b. Unexposed	14	Galv.	-
Shelves:			
a. Wall mounted	16	S/S	4
b. Fixture Mounted	16	S/S	4
c. Table	16	S/S	4
d. Refrigerator		S/S Wire	
Sinks:			
a. Sink Basin	14	S/S	4
b. Drainboard	14	S/S	4
c. Reinforcing Plate	14	S/S	2B
d. Waste Handle Bracket	14	S/S	4
Wall Flashing	18	S/S	4

G. FIRE SUPPRESSION SYSTEM

Fire suppression system shall be an Ansul “R102 UL 300 Wet chemical system as follows:

1. The restaurant fire suppression system shall meet the requirements of NFPA Standards 17A and 96, ULC Standard CEX-747, UL Standard 1254 and 300, and shall be listed per ULI EX-3470.

2. The fire suppression system shall be a pre-engineered, automatic, wet agent type providing protection for the plenum(s), exhaust duct(s) and all grease-producing cooking surfaces (appliances) located under canopy/non-canopy hood(s).

3. The system shall be a normally non-pressurized, cartridge-operated type, with a fixed agent distribution network. All system components shall be UL/ULC Listed as part of the manufacturer's total system. The fire suppression system manufacturer shall be ISO 9002 registered

4. Nozzles shall be piped for those appliances that require dedicated nozzle coverage.

5. Manual actuation of the system shall be accomplished by pulling the ring pin on the cable-operated remote pull station.

6. Mechanical release and agent container assemblies shall be housed in a stainless steel metal enclosure and securely mounted.

7. Gas shutoff valve(s) shall be furnished by the restaurant fire suppression system contractor and installed by the Design/Builder.

8. The restaurant fire suppression system contractor shall obtain permits and test the system in the presence of the owner's representative and the authority having jurisdiction (as required).

H. EXHAUST HOODS

Hoods shall be UL listed and approved engineered, of one or more of the following styles: UV Water wash, UV dry, Water wash, Cartridge or filter type. Exhaust hoods to be tested to UL Standard 710 and is UL Listed under the Category "Exhaust Hood with Exhaust Damper" or Exhaust Hood without Exhaust damper. The ventilator shall extract up to 95%, of the grease by centrifugal force when operated and maintained in accordance with the design specifications. The extracted grease is to remain out of the airstream until in the case of water wash upon activation of the wash cycle, (non water wash by end of day cleaning). Hood shall comply with IMC, UMC, BOCA and SBCCI mechanical codes and shall be UL, CUL and NSF listed. Hood shall be constructed of 18 gauge type 304 stainless steel, all exposed surfaces shall be a number 4 finish. The amount of exhaust volume required is dependent upon the type of cooking equipment and the type and volume of cooking. Light fixture shall provide minimum foot candles of light, as required by the Health Department.

J. COLD STORAGE ROOM ASSEMBLY

Furnish cold storage room per plans and detail drawings, with all labor, material, equipment, and tools required for the complete installation of modular foamed panel pre-fabricated cold storage room of size and shape as shown on plan and to include the following:

1. Work included:
   a. Wall, corner and ceiling panels, hinged door assembly, light switch and light fixtures, dial thermometer, utility penetrations, escutcheon Installation shall be provided by the manufacturer.
   b. Interior ceiling height shall be 9'-0". Carefully check dimensions of areas and advise of any discrepancies prior to fabrication of unit.

2. Material:

a. Insulation shall be non-burning urethane foamed in place, not frothed or rigid board-form.
b. Insulation shall be fluorocarbon filled (F-11) 95% closed cell content, nominal density of 2.0 pounds + 0.1 per cubic foot. Dimensional stability shall be from -45 degree F. (+7 degree C.) to 200 degree F. (93 degree C).
c. Insulation shall have a thermal conductivity (K-factor) not to exceed (0.14 B.T.U./ hour/ square foot) as tested on ASTM C-177, at 75 degree F. (24 degree C.) mean temperature and an overall coefficient of heat transfer factor (U) not to exceed 0.029.
d. Classification: Each compartment shall bear a label “Class 1-Insulated Panel” as certified by an independent testing laboratory to have a surface burn spread 25 or less as determined by ASTM E84, UBC No. 8-1, Class A National Fire Protection Association NFPA Number 101, “Life Safety Code.”

3. Finishes:
   a. Exposed exterior shall be 20 gauge stainless steel, type 304, with a number 4 finish.
   b. Interior walls shall be 20 gauge stainless steel, type 304, with a number 4 finish.
   c. Interior ceiling shall be smooth white aluminum - 040” thick.
   d. Unexposed exterior shall be .040 thick galvanized.
   e. Sub-floor insulation shall be provided for both cooler and freezer, if cooler is on grade, insulation is not required. Finished floor in both cooler and freezer rooms shall be by Design/Builder.

K. REMOTE REFRIGERATION

Furnish refrigeration rack complete per manufacturer's standard specifications and to include the following:

1. Rack shall be a U.L. listed, air cooled, water cooled if chilled water is available, pre-wired, pre-assembled unit fabricated of structural steel. The rack shall to be welded construction with all welds grounds smooth. Clean and paint with a prime coat of zinc chromate then finish with a coat of baked on enamel epoxy paint. All sheet metal is to be de-burred. Provide vibration isolation rails. Compressors, condensers and connecting piping shall be installed in such manner as to eliminate noise and vibration being transmitted to any part of the building.
2. Rack to have a weatherproof housing for mounting on roof. If rack is indoors, provide rack with an open frame.
3. This rack shall be sized for the number of compressors required to provide refrigeration to remote walk in coolers, freezer & fixtures.
4. Include as part of this item all parts materials and accessories, such as evaporator coils, (at walk-ins) refrigerant piping, insulation, traps, thermostat, solenoid valve, expansion valve, etc. as required for a complete functioning system.
5. Installation to be performed in a workman like manner per ASHRAE standards.

END OF SECTION