NORTH CAROLINA PKG. REF.	
ITEM	PAGE #
CEILING FASTENING	C21.0-C21.6
OUTRIGGERS & CROSSMEMBERS	C3.0
FASTENING INSTRUCTIONS	C2.0-C2.4
WALL INTERCONNECTIONS	C16.0
WALL HEADERS	C12.0-C12.2
ATTIC ACCESS	C23.0
SUPPLY DUCT PENETRATION	C31.0

UNIT C

ITEM	MFG
LIGHT FIXTURE, CPF 240	METALUX
EXIT SIGNS	SUR-LITES
HVAC	BARD
BATHROOM FAN	BROAN
WATER HEATER	RHEEM
TOILET	ATLAS
FAUCET	MIAMI
LAVATORY	MIAMI
GRAB BAR	DONNERS

APPROVED
APR 23 2007
REVIEWED BY: S. FRANCIS
HWCNC, P.C.

DESIGN SPACE, INC.	SOUTHLAND MODULAR
91 HARVEY VICKERS RD., DOUGLAS, GA. 31533 CLINCH COUNTY IND. PARK, HOMERVILLE, GA. 31634	1110 IND. PARK RD. McRAE, GA. 31055
DATE: 03/26/2007	
SCALE : -NTS-	
CODES: SEE SUMMARY	REVISIONS: BY: BW
LABELS: NC.	
17078 A/E	ASSEMBLY (A-2) SHEET 1-1
PACKAGE DETAILS	PLAN NO. 1954-8137

Job	Truss	Truss Type	Qty	Ply	DESIGN SPACE 316 BCTC
34382	F063106	FLAT	1	1	

Universal Forest Products Inc., Grand Rapids, MI 49525, J. Visser — 6.200 s Apr 28 2005 MiTek Industries, Inc. Tue Jan 31 14:04:16 2006

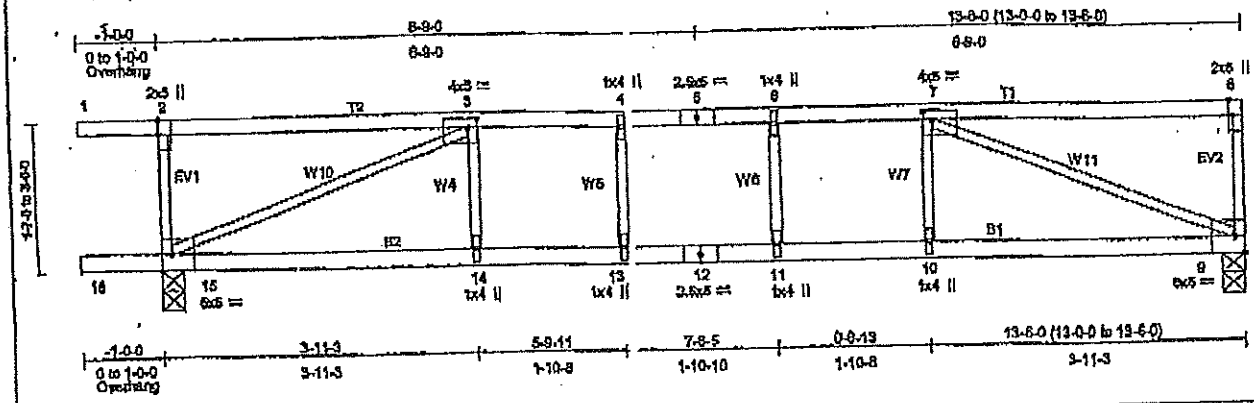


Plate Offsets (X,Y): [2:0-2-0,Edge], [3:0-1-4,0-1-8], [7:0-1-4,0-1-8], [8:0-2-0,Edge], [15:0-1-8,Edge]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	21.0	Plates Increase	1.15	TC	0.84	Vert(LL)	0.30	11-13	>533	240	MT20	197/144
(Ground Snow=30.0)		Lumber Increase	1.15	BC	0.70	Vert(TL)	-0.27	11-13	>603	180		
TCDL	7.0	Rep Stress Incr	YES	WB	0.86	Horz(TL)	+0.04	9	n/a	n/a		
BCLL	10.0	Code	IBC2003/TPI2002	(Matrix)							Weight: 32 lb	
BCDL	7.0											

LUMBER
TOP CHORD 2 X 3 SPF No.2
BOT CHORD 2 X 3 SPF No.2
WEBS 2 X 2 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-0-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 4-5-4 oc bracing.

REACTIONS (lb/size) 9=495/0-3-8, 15=581/0-3-8
Max Horz 15=-176(load case 6)
Max Uplift 9=-599(load case 7), 15=-743(load case 6)
Max Grav 9=605(load case 12), 15=709(load case 12)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-15=-210/333, 1-2=0/0, 2-3=-39/85, 3-4=-1025/1245, 4-5=-1025/1245, 5-6=-1025/1245, 6-7=-1025/1245, 7-8=-28/117, 8-9=-123/187
BOT CHORD 15-16=0/0, 14-15=-1082/1023, 13-14=-1082/1025, 12-13=-1082/1025, 11-12=-1082/1025, 10-11=-1082/1025, 9-10=-1082/1024
WEBS 3-14=-73/178, 4-13=-45/90, 5-11=-39/79, 7-10=-49/170, 7-11=-1098/1243, 3-15=-1116/1267

NOTES
1) Wind: ASCE 7-02; 140mph; h=30ft; TCDL=4.2psf; BCDL=4.2psf; Category II; Exp C; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; cantilever left exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.33. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
2) TCLL: ASCE 7-02; Pg=30.0 psf (ground snow); Ps=21.0 psf (roof snow); Category II; Exp C; Partially Exp.; Ct= 1
3) Roof design snow load has been reduced to account for slope.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed as per IBC Sect. 1605.3.1.1 Load reduction, for multiple live loads.
6) Provide adequate drainage to prevent water ponding.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 599 lb uplift at joint 9 and 743 lb uplift at joint 15.
8) This truss is designed in accordance with the 2003 International Building Code section 2308.1 and referenced standard ANSI/TPI 1.
9) This truss has been designed to meet the 2003 IBC Section 2308.10.7.1; 2003 IRC R802.10.2
10) When adjusting the variable span dimension, adjust the post placement dimensions proportional to the change in span.
11) This truss has not been designed for water ponding or ice dams. The building designer shall Provide adequate drainage to prevent water accumulation (min. 0.25 in./ft. slope to drain).
12) Based on: F063105. Revision: Added TC &BC splices, moved webs 1/2" right for symmetry.

NORTH CAROLINA PROFESSIONAL SEAL 026071 ENGINEER KEVIN W. FREEMAN
SOUTH CAROLINA REGISTERED 20654 PROFESSIONAL ENGINEER KEVIN W. FREEMAN
GEORGIA REGISTERED No.26639 PROFESSIONAL ENGINEER KEVIN W. FREEMAN
APPROVED APR 23 2007 REVIEWED BY: S. FRANCIS

⚠ WARNING - *Verify design parameters and READ NOTES*

Universal Forest Products, Inc. 2801 EAST BELTLINE NE STE 115
PHONE (616) 364-6161 FAX (616) 365-0060 GRAND RAPIDS, MI 49525

This building component has only been designed for the loads noted on this drawing. Construction and lifting forces have not been considered. The builder is responsible for lifting methods and system design. Builder responsibilities are defined under section 2.3 of TPI-2002. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult BCSI 1-03 from the Wood Truss Council of America and Truss Plate Institute Recommendation available from WTCA, 6300 Enterprise LN, Madison, WI 53719. \\Support\Mitek\Support\templates\up.jpg (c)copyright 2006 by Universal Forest Products, Inc.

COMcheck Software Version 3.4.0

Envelope Compliance Certificate

2003 IECC

Report Date: 04/12/07

Data filename: C:\Documents and Settings\All Users\Documents\KAG Documents-Originals\Comcheck\032207DSI-NC.cck

Section 1: Project Information

Project Title: DSI 17078 A/E KAG.#032207DSI

Construction Site:

Owner/Agent:

Designer/Contractor:
Kenneth A. Godfrey, P.E.
Design Space, Inc.
91 Harvey Vickers Road
Douglas, GA 31533
912-384-9211

Section 2: General Information

Building Location (for weather data):	Raleigh, North Carolina
Climate Zone:	7a
Heating Degree Days (base 65 degrees F):	3397
Cooling Degree Days (base 65 degrees F):	1493
Project Type:	New Construction
Vertical Glazing / Wall Area Pct.:	5%

Building Type	Floor Area
Office	3965

Section 3: Requirements Checklist

Climate-Specific Requirements:

Component Name/Description	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor
Roof 1: All-Wood Joist/Rafter/Truss	3965	19.0	0.0	0.054	0.068
Exterior Wall 1: Wood Frame, Any Spacing	2828	11.0	0.0	0.103	0.131
Door 1: Solid	10	---	---	0.560	0.203
Door 2: Glass, Clear, SHGC 0.75, PF 0.06	63	---	---	0.720	0.702
Window 1: Metal Frame:Double Pane with Low-E, Clear, SHGC 0.75, PF 0.12	61	---	---	0.540	0.702
Door 3: Glass, Clear, SHGC 0.75, PF 0.12	10	---	---	0.720	0.702
Floor 1: All-Wood Joist/Truss	3965	11.0	0.0	0.075	0.090

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.

Air Leakage, Component Certification, and Vapor Retarder Requirements:

- ☐ 1. All joints and penetrations are caulked, gasketed or covered with a moisture vapor-permeable wrapping material installed in accordance with the manufacturer's installation instructions.
- ☐ 2. Windows, doors, and skylights certified as meeting leakage requirements.
- ☐ 3. Component R-values & U-factors labeled as certified.
- ☐ 4. Insulation installed according to manufacturer's instructions, in substantial contact with the surface being insulated, and in a manner that achieves the rated R-value without compressing the insulation.
- ☐ 5. Stair, elevator shaft vents, and other dampers integral to the building envelope are equipped with motorized dampers.

- ☐ 6. Cargo doors and loading dock doors are weather sealed.
- ☐ 7. Recessed lighting fixtures are: (i) Type IC rated and sealed or gasketed; or (ii) installed inside an appropriate air-tight assembly with a 0.5 inch clearance from combustible materials and with 3 inches clearance from insulation material.
- ☐ 8. Building entrance doors have a vestibule and equipped with closing devices.

Exceptions:

Building entrances with revolving doors.

Doors that open directly from a space less than 3000 sq. ft. in area.

Note: Vapor retarder not required in this location.

Section 4: Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed envelope system has been designed to meet the 2003 IECC requirements in COMcheck Version 3.4.0 and to comply with the mandatory requirements in the Requirements Checklist.

KENNETH A. GODFREY

Name - Title

Signature

Date

APR 20 2007

APPROVED

APR 23 2007

REVIEWED BY: S. FRANCIS

HWCNC, P.C.

COM*check* Software Version 3.4.0

Lighting Compliance Certificate

2003 IECC

Report Date: 04/12/07

Data filename: C:\Documents and Settings\All Users\Documents\KAG Documents-Originals\Comcheck\032207DSI-NC.cck

Section 1: Project Information

Project Title: DSI 17078 A/E KAG.#032207DSI

Construction Site:

Owner/Agent:

Designer/Contractor:
Kenneth A. Godfrey, P.E.
Design Space, Inc.
91 Harvey Vickers Road
Douglas, GA 31533
912-384-9211

Section 2: General Information

Building Use Description by:
Project Type: New Construction

Building Type	Floor Area
Office	3965

Section 3: Requirements Checklist

Interior Lighting:

☐ 1. Total actual watts must be less than or equal to total allowed watts.

Allowed Watts	Actual Watts	Complies
3965	3840	YES

☐ 2. Exit signs 5 Watts or less per side.

Exterior Lighting:

☐ 3. Efficacy greater than 45 lumens/W.
Exceptions:

Specialized lighting highlighting features of historic buildings; signage; safety or security lighting; low-voltage landscape lighting.

Controls, Switching, and Wiring:

☐ 4. Independent controls for each space (switch/occupancy sensor).
Exceptions:

Areas designated as security or emergency areas that must be continuously illuminated.

Lighting in stairways or corridors that are elements of the means of egress.

☐ 5. Master switch at entry to hotel/motel guest room.

☐ 6. Individual dwelling units separately metered.

☐ 7. Each space provided with a manual control to provide uniform light reduction by at least 50%.
Exceptions:

Only one luminaire in space;

An occupant-sensing device controls the area;

The area is a corridor, storeroom, restroom, public lobby or guest room;

Areas that use less than 0.6 Watts/sq.ft.

☐ 8. Automatic lighting shutoff control in buildings larger than 5,000 sq.ft.
Exceptions:

Areas with only one luminaire, corridors, storerooms, restrooms, or public lobbies.

☐ 9. Photocell/astronomical time switch on exterior lights.
Exceptions:

Lighting intended for 24 hour use.

☐ 10. Tandem wired one-lamp and three-lamp ballasted luminaires (No single-lamp ballasts).
Exceptions:

Electronic high-frequency ballasts; Luminaires on emergency circuits or with no available pair.

Section 4: Compliance Statement

Compliance Statement: The proposed lighting design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed lighting system has been designed to meet the 2003 IECC, Chapter 8, requirements in COM*check* Version 3.4.0 and to comply with the mandatory requirements in the Requirements Checklist.

KENNETH A. GODFREY
Name - Title

Signature

Date

APR 20 2007

COMcheck Software Version 3.4.0

Lighting Application Worksheet

2003 IECC

Report Date:

Data filename: C:\Documents and Settings\All Users\Documents\KAG Documents-Originals\Comcheck\032207DSI-NC.cck

Section 1: Allowed Lighting Power Calculation

A	B Floor Area	C Allowed Watts / ft2	D Allowed Watts
Office	3965	1	3965
		Total Allowed Watts =	3965

Section 2: Actual Lighting Power Calculation

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
T8 / T12 Fluorescent 1: FL(1): 2X4 FLUORESCENT / 48" T8 32W / Electronic	3	40	90	3600
Linear Fluorescent 2: FL(2): 2x4 FLURESCENT-S / 48" T8 32W / Electronic	2	3	60	180
Linear Fluorescent 3: FL(3): 1x4 FLUORESCENT / 48" T8 32W / Electronic	2	1	60	60
			Total Actual Watts =	3840

Section 3: Compliance Calculation

If the Total Allowed Watts minus the Total Actual Watts is greater than or equal to zero, the building complies.

Total Allowed Watts =	3965
Total Actual Watts =	3840
Project Compliance =	125

COMcheck Software Version 3.4.0

Mechanical Compliance Certificate

2003 IECC

Report Date: 04/12/07

Data filename: C:\Documents and Settings\All Users\Documents\KAG Documents-Originals\Comcheck\032207DSI-NC.cck

Section 1: Project Information

Project Title: DSI 17078 A/E KAG.#032207DSI

Construction Site:

Owner/Agent:

Designer/Contractor:
Kenneth A. Godfrey, P.E.
Design Space, Inc.
91 Harvey Vickers Road
Douglas, GA 31533
912-384-9211

Section 2: General Information

Building Location (for weather data):	Raleigh, North Carolina
Climate Zone:	7a
Heating Degree Days (base 65 degrees F):	3397
Cooling Degree Days (base 65 degrees F):	1493
Project Type:	New Construction

Section 3: Mechanical Systems List

Quantity	System Type & Description
4	HVAC System 1: Rooftop Packaged Heat Pump, Cooling Capacity <65 kBtu/h, Air-Cooled Condenser / Single Zone
1	Storage Water Heater 1: Service Water Heater

Section 4: Requirements Checklist

Requirements Specific To: HVAC System 1 :

- ☐ 1. Equipment minimum efficiency: Heat Pump: 6.6 HSPF, 9.7 SEER
- ☐ 2. Heat pump thermostat required when supplemental electric resistance heat is installed

Requirements Specific To: Storage Water Heater 1 :

- ☐ 1. Heat traps in inlet/outlet fittings
- ☐ 2. 1/2-in. insulation on 8 ft of inlet/outlet piping if no integral heat traps
- ☐ 3. No efficiency requirements for water heater with storage capacity less than 20 gallons.

Generic Requirements: Must be met by all systems to which the requirement is applicable:

- ☐ 1. Load calculations per 2001 ASHRAE Fundamentals
- ☐ 2. Plant equipment and system capacity no greater than needed to meet loads
  - Exception: Standby equipment automatically off when primary system is operating
  - Exception: Multiple units controlled to sequence operation as a function of load
- ☐ 3. Minimum one temperature control device per system
- ☐ 4. Minimum one humidity control device per installed humidification/dehumidification system
- ☐ 5. Automatic Controls: Setback to 55 degrees F (heat) and 85 degrees F (cool); 7-day clock, 2-hour occupant override, 10-hour backup
  - Exception: Continuously operating zones

- Exception: 2 kW demand or less, submit calculations

☐ 6. Automatic shut-off dampers on exhaust systems and supply systems with airflow >3,000 cfm

☐ 7. Outside-air source for ventilation; system capable of reducing OSA to required minimum

☐ 8. R-5 supply and return air duct insulation in unconditioned spaces R-8 supply and return air duct insulation outside the building R-8 insulation between ducts and the building exterior when ducts are part of a building assembly

- Exception: Ducts located within equipment
- Exception: Ducts with interior and exterior temperature difference not exceeding 15 degrees F.

☐ 9. Ducts sealed - longitudinal seams on rigid ducts; transverse seams on all ducts; UL 181A or 181B tapes and mastics

- Exception: Continuously welded and locking-type longitudinal joints and seams on ducts operating at static pressures less than 2 inches w.g. pressure classification

☐ 10. Mechanical fasteners and sealants used to connect ducts and air distribution equipment

☐ 11. Operation and maintenance manual provided to building owner

☐ 12. Balancing devices provided in accordance with IMC 603.15

☐ 13. Newly purchased service water heating equipment meets the efficiency requirements

☐ 14. Water heater temperature controls: 110 degrees F for dwelling units or 90 degrees F for other occupancies

☐ 15. Stair and elevator shaft vents are equipped with motorized dampers

Section 5: Compliance Statement

Compliance Statement: The proposed mechanical design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2003 IECC requirements in COM*check* Version 3.4.0 and to comply with the mandatory requirements in the Requirements Checklist.

KENNETH A. GODFREY _____ _____

Name - Title Signature Date

APR 20 2005

COM*check* Software Version 3.4.0
Mechanical Requirements Description

2003 IECC

Report Date:

Data filename: C:\Documents and Settings\All Users\Documents\KAG Documents-Originals\Comcheck\032207DSI-NC.cck

The following list provides more detailed descriptions of the requirements in Section 4 of the Mechanical Compliance Certificate.

Requirements Specific To: HVAC System 1 :

1. The specified heating and/or cooling equipment is covered by the ASHRAE 90.1 Code and must meet the following minimum efficiency: Heat Pump: 6.6 HSPF, 9.7 SEER
2. Heat pumps having supplementary electric resistance heat must have controls that, except during defrost, prevent supplementary heat operation when the heat pump can meet the heating load.

Requirements Specific To: Storage Water Heater 1 :

1. Heat traps are required on noncirculating water heating systems on both inlet and outlet connections. Heat traps may be purchased or field-fabricated by creating a loop or inverted U-shaped arrangement on the inlet and outlet pipes.
2. Pipe insulation for the specified noncirculating service hot water system is required for all piping in the following categories:a) the first 8 ft of outlet piping from any constant-temperature, noncirculating storage systemb) the inlet piping between the storage tank and a heat trap in a noncirculating storage systemPipe insulation must be at least 1/2 in. and have a conductivity no >0.28 Btu-in/(h-ft2-degrees F).
3. Service water heating equipment used solely for heating potable water, pool heaters, and hot water storage tanks must meet the following minimum efficiency: No efficiency requirements for water heater with storage capacity less than 20 gallons.

Generic Requirements: Must be met by all systems to which the requirement is applicable:

1. Design heating and cooling loads for the building must be determined using procedures in the ASHRAE Handbook of Fundamentals or an approved equivalent calculation procedure.
2. All equipment and systems must be sized to be no greater than needed to meet calculated loads. A single piece of equipment providing both heating and cooling must satisfy this provision for one function with the capacity for the other function as small as possible, within available equipment options.
   - Exception: The equipment and/or system capacity may be greater than calculated loads for standby purposes. Standby equipment must be automatically controlled to be off when the primary equipment and/or system is operating.
   - Exception: Multiple units of the same equipment type whose combined capacities exceed the calculated load are allowed if they are provided with controls to sequence operation of the units as the load increases or decreases.
3. Each heating or cooling system serving a single zone must have its own temperature control device.
4. Each humidification system must have its own humidity control device.
5. The system or zone control must be a programmable thermostat or other automatic control meeting the following criteria:a) capable of setting back temperature to 55 degrees F during heating and setting up to 85 degrees F during coolingb) capable of automatically setting back or shutting down systems during unoccupied hours using 7 different day schedulesc) have an accessible 2-hour occupant overridd) have a battery back-up capable of maintaining programmed settings for at least 10 hours without power.
   - Exception: A setback or shutoff control is not required on thermostats that control systems serving areas that operate continuously.
   - Exception: A setback or shutoff control is not required on systems with total energy demand of 2 kW (6,826 Btu/h) or less.
6. Outdoor-air supply systems with design airflow rates >3,000 cfm of outdoor air and all exhaust systems must have dampers that are automatically closed while the equipment is not operating.
7. The system must supply outside ventilation air as required by Chapter 4 of the International Mechanical Code. If the ventilation system is designed to supply outdoor-air quantities exceeding minimum required levels, the system must be capable of reducing outdoor-air flow to the minimum required levels.
8. Air ducts must be insulated to the following levels:a) Supply and return air ducts for conditioned air located in unconditioned spaces (spaces neither heated nor cooled) must be insulated with a minimum of R-5. Unconditioned spaces include attics, crawl spaces, unheated basements, and unheated garages.b) Supply and return air ducts and plenums must be insulated to a minimum of R-8 when located outside the building.c) When ducts are located within exterior components (e.g., floors or roofs), minimum R-8 insulation is required only between the duct and the building exterior.
   - Exception: Duct insulation is not required on ducts located within equipment.

- Exception: Duct insulation is not required when the design temperature difference between the interior and exterior of the duct or plenum does not exceed 15 degrees F.

9. All joints, longitudinal and transverse seams, and connections in ductwork must be securely sealed using weldments; mechanical fasteners with seals, gaskets, or mastics; mesh and mastic sealing systems; or tapes. Tapes and mastics must be listed and labeled in accordance with UL 181A or UL 181B.

   - Exception: Continuously welded and locking-type longitudinal joints and seams on ducts operating at static pressures less than 2 inches w.g. pressure classification.

10. Mechanical fasteners and seals, mastics, or gaskets must be used when connecting ducts to fans and other air distribution equipment, including multiple-zone terminal units.
11. Operation and maintenance documentation must be provided to the owner that includes at least the following information:a) equipment capacity (input and output) and required maintenance actionsb) equipment operation and maintenance manualsc) HVAC system control maintenance and calibration information, including wiring diagrams, schematics, and control sequence descriptions; desired or field-determined set points must be permanently recorded on control drawings, at control devices, or, for digital control systems, in programming commentsd) complete narrative of how each system is intended to operate.
12. Each supply air outlet or diffuser and each zone terminal device (such as VAV or mixing box) must have its own balancing device. Acceptable balancing devices include adjustable dampers located within the ductwork, terminal devices, and supply air diffusers.
13. Service water heating equipment must meet minimum Federal efficiency requirements included in the National Appliance Energy Conservation Act and the Energy Policy Act of 1992, which meet or exceed ASHRAE 90.1 Code. New service water heating equipment can be assumed to meet these requirements.
14. Water-heating equipment must be provided with controls that allow the user to set the water temperature to 110 degrees F for dwelling units and 90 degrees F for other occupancies. Controls must limit output temperatures of lavatories in public facility restrooms to 110 degrees F.
15. Stair and elevator shaft vents must be equipped with motorized dampers capable of being automatically closed during normal building operation and interlocked to open as required by fire and smoke detection systems. All gravity outdoor air supply and exhaust hoods, vents, and ventilators must be equipped with motorized dampers that will automatically shut when the spaces served are not in use. Exceptions: - Gravity (non-motorized) dampers are acceptable in buildings less than three stories in height above grade. - Ventilation systems serving unconditioned spaces.

ACCESSIBILITY NOTES:

1. ACCESS TO BUILDING FOR PERSONS IN WHEELCHAIRS IS DESIGNED BY AND FIELD BUILT BY OTHERS AND SUBJECT TO LOCAL JURISDICTION. THE PRIMARY ENTRANCE AND REQUIRED EXITS MUST BE ACCESSIBLE.

2. THE INTERNATIONAL SYMBOL OF ACCESSIBILITY SIGN SHALL BE DISPLAYED AT ALL ACCESSIBLE RESTROOM FACILITIES AND AT ACCESSIBLE BUILDING ENTRANCES UNLESS ALL ENTRANCES ARE ACCESSIBLE. INACCESSIBLE ENTRANCES SHALL HAVE DIRECTIONAL SIGNS INDICATING THE ROUTE TO THE NEAREST ACCESSIBLE ENTRANCE. AT LEAST 50% OF ALL PUBLIC ENTRANCES MUST BE ACCESSIBLE.

3. ACCESSIBLE DRINKING FOUNTAINS SHALL HAVE A SPOUT HEIGHT NO HIGHER THAN 36 INCHES ABOVE THE FLOOR AND EDGE OF BASIN NO HIGHER THAN 34 INCHES ABOVE THE FLOOR FOR INDIVIDUALS IN WHEELCHAIRS. ADDITIONALLY, DRINKING WATER PROVISIONS SHALL BE MADE FOR INDIVIDUALS WHO HAVE DIFFICULTY IN BENDING.

4. WHERE STORAGE FACILITIES SUCH AS CABINETS, SHELVES, CLOSETS, AND DRAWERS ARE PROVIDED AT LEASE ONE OF EACH TYPE PROVIDED SHALL CONTAIN STORAGE SPACE COMPLYING WITH THE FOLLOWING: DOORS, ETC.. TO SUCH SPACES SHALL BE ACCESSIBLE (i.e. TOUCH LATCHES, U-SHAPED PULLS); SPACES SHALL BE WITHIN 15 INCHES MINIMUM AND 48 INCHES MAXIMUM OF THE FLOOR FOR FORWARD REACH OR 9 INCHES MINIMUM AND 54 INCHES MAXIMUM, OF THE FLOOR FOR SIDE REACH; CLOTHES RODS SHALL BE A MAXIMUM OF 54 INCHES ABOVE THE FLOOR (48 INCHES MAXIMUM WHEN DISTANCE FROM WHEELCHAR TO ROD EXCEEDS 10 INCHES).

5. CONTROLS, DISPENSERS, RECEPTACLES AND OTHER OPERABLE EQUIPMENT SHALL BE NO HIGHER THAN 45 INCHES ABOVE THE FLOOR FOR FRONT APPROACH OR 54 INCHES ABLE THE FLOOR FOR SIDE APPROACH. RECEPTACLES ON WALLS SHALL BE MOUNTED NO LESS THAN 15 INCHES ABOVE THE FLOOR. EXCEPTION: HEIGHT LIMITATIONS DO NOT APPLY WHERE THE USE OF SPECIAL EQUIPMENT DICTATES OTHERWISE OR WHERE ELECTRICAL RECEPTACLES ARE NOT NORMALLY INTENDED FOR USE BY BUILDING OCCUPANTS.

6. WHERE EMERGENCY WARNING SYSTEMS ARE PROVIDED, THEY SHALL INCLUDE BOTH AUDIBLE AND VISUAL ALARMS. THE VISUAL ALARMS SHALL BE LOCATED THROUGHOUT, INCLUDING RESTROOMS, AND PLACED 80 INCHES ABOVE THE FLOOR OR 6 INCHES BELOW CEILING, WHICHEVER IS LOWER.

7. DOORS TO ALL ACCESSIBLE SPACES SHALL HAVE ACCESSIBLE HARDWARE (i.e. LEVER-OPERATED, PUSH-TYPE, U-SHAPED) MOUNTED NO HIGHER THAN 48 INCHES ABOVE THE FLOOR.

8. FLOOR SURFACES SHALL BE STABLE, FIRM, AND SLIP-RESISTANT. CHANGES IN LEVEL BETWEEN 0.25 INCH AND 0.5 INCH SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1:2. CHANGES IN LEVEL GREATER THAN 0.5 INCH REQUIRE RAMPS. CARPET PILE THICKNESS SHALL BE 0.5 INCH MAX. GRATINGS IN FLOOR SHALL BE SPACES NO GREATER THAN 0.5 INCH WIDE IN ONE DIRECTION. DOORWAY THRESHOLDS SHALL NOT EXCEED 0.5 INCH IN HEIGHT.

9. ALL DOORS SHALL BE OPENABLE BY A SINGLE EFFORT. THE MAXIMUM FORCE REQUIRED TO OPEN A DOOR SHALL NOT EXCEED 8.5 LBS. FOR EXTERIOR SWINGING DOORS AND 5 LBS. FOR ALL SLIDING, FOLDING, AND INTERIOR SWINGING DOORS.

10. ACCESSIBLE WATER CLOSETS SHALL BE 17 INCHES TO 19 INCHES FROM THE FLOOR TO THE TOP OF THE SEAT. GRAB BARS SHALL BE 36 INCHES LONG MINIMUM WHEN LOCATED BEHIND WATER CLOSET AND 42 INCHES MINIMUM WHEN LOCATED ALONG SIDE OF WATER CLOSET, AND SHALL BE MOUNTED AT 33 INCHES TO 36 INCHES FROM THE FLOOR TO THE CENTERLINE OF THE BAR. SIDE WALL GRAB BARS SHALL BE MOUNTED WITH THE FAR END LOCATED A MAXIMUM OF 12 INCHES FROM THE WALL BEHIND THE WATER CLOSET.

11. ACCESSIBLE URINALS SHALL BE STALL-TYPE OR WALL HUNG WITH ELONGATED RIMS AT A MAXIMUM OF 17 INCHES ABOVE THE FLOOR AND 14 INCHES FROM THE WALL.

12. ACCESSIBLE LAVATORIES SHALL BE MOUNTED WITH THE RIM NO HIGHER THAN 34 INCHES ABOVE THE FLOOR AND A CLEARANCE OF AT LEAST 29 INCHES ABOVE THE FLOOR TO THE BOTTOM OF THE APRON.

13. ACCESSIBLE SINKS SHALL BE MOUNTED WITH THE RIM NO HIGHER THAN 34 INCHES ABOVE THE FLOOR AND A CLEARANCE OF AT LEAST 27 INCHES HIGH, 30 INCHES WIDE, AND 19 INCHES DEEP UNDERNEATH SINK. THE SINK DEPTH SHALL BE 6.5 INCHES MAXIMUM.

14. HOT WATER AND DRAIN PIPES UNDER ACCESSIBLE LAVATORIES AND SINKS SHALL BE INSULATED OR OTHERWISE CONFIGURED TO PROTECT AGAINST CONTACT. INSULATION OR PROTECTION MATERIALS MAY BE SITE INSTALLED. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER ACCESSIBLE LAVATORIES AND SINKS.

15. ACCESSIBLE LAVATORIES AND SINKS SHALL HAVE ACCESSIBLE FAUCETS (i.e. LEVER-OPERATED, PUSH-TYPE, ELECTRONICALLY CONTROLLED).

16. WHERE MIRRORS ARE PROVIDED IN RESTROOMS, AT LEAST ON SHALL BE PROVED WITH ITS BOTTOM EDGE NO HIGHER THAN 40 INCHES ABOVE THE FLOOR.

17. WHERE MEDICINE CABINETS ARE PROVIDED, AT LEAST ONE SHALL BE LOCATED WITH USEABLE SHELF NO HIGHER THAN 44 INCHES ABOVE THE FLOOR.

18. GRAB BARS REQUIRED FOR ACCESSIBILITY SHALL BE 1.25 INCH TO 1.5 INCHES IN DIAMETER WITH 1.5 INCHES OF CLEAR SPACE BETWEEN THE BAR AND THE WALL.

19. TOILET PAPER DESPENSERS SHALL BE INSTALLED WITHIN REACH AND MOUNTED 19 INCHES ABOVE THE FLOOR TO THE CENTERLINE OF THE DESPENSER. DISPENSERS THAT CONTROL DELIVERY, OR THAT DO NOT PERMIT CONTINUOUS FLOW, SHALL NOT BE USED.

20. WATER CLOSET FLUSH CONTROL SHALL BE MOUNTED ON THE WIDE SIDE OF THE TOILET AREA.

21. A TOWEL DISPENSER SHALL BE LOCATED ADJACENT TO ALL ACCESSIBLE LAVATORIES.

GENERAL NOTES:

1. ALL CONSTRUCTION, MATERIALS, AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE CODES SPECIFIED ON THESE DRAWINGS.

2. THESE PLANS INCLUDE DESIGN FOR THE FACTORY BUILT PORTION OF THE MODULAR STRUCTURE AND PORTIONS OF THE SITE BUILD CONSTRUCTION. THESE PLANS AND DESIGN PLANS FOR ALL ELEMENTS DESIGNATED TO BE DESIGNED BY OTHERS AND/OR SITE INSTALLED MUST BE SUBMITTED TO AND REVIEWED BY THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE (DESIGNER OF RECORD) FOR COMPATIBILITY WITH THE DESIGN OF THE OVERALL BUILDING PROJECT AS REQUIRED BY THE APPLICABLE CODES AND LAWS.

3. REFER TO MANUFACTURER'S APPROVED SYSTEMS PACKAGE FOR ADDITIONAL CONSTRUCTION DETAILS AND SPECIFICATIONS NOT INCLUDED IN THESE PLANS.

4. REFER TO ATTACHED ENERGY CODE COMPLIANCE FORM AND/OR HEAT LOSS AND GAIN CALCULATIONS FOR ADDITIONAL ENERGY CODE CONSTRUCTION REQUIREMENTS NOT INCLUDED IN THESE PLANS.

5. ALL DOORS SHALL BE OPENABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY, TOOL, SPECIAL KNOWLEDGE OR EFFORT. MANUALLY OPERATED FLUSH BOLTS OR SURFACE BOLTS SHALL NOT BE USED.

6. WHEN NOT SHOWN ON THE PLANS PROVISIONS FOR EXIT DISCHARGE LIGHTING (INCLUDING EXIT DISCHARGE EMERGENCY LIGHTING) ARE DESIGNED BY OTHERS AND THE RESPONSIBILITY OF THE BUILDING OWNER AND SUBJECT TO LOCAL JURISDICTION APPROVAL.

7. WHERE CORRIDORS ARE PROVIDED THE MINIMUM CORRIDOR WIDTH SHALL BE AS SHOWN ON THESE PLANS OR 44 INCHES, WHICHEVER IS GREATER.

8. WHERE CORRIDORS ARE PROVIDED THE MINIMUM CORRIDOR FINISH SHALL BE CLASS A.

9. PORTABLE FIRE EXTINGUISHERS SHALL BE PROVIDED BY OTHERS AS REQUIRED BY THE IFC.

10. ALL GLAZING WITHIN A 24 INCH ARC OF DOORS WHOSE BOTTOM EDGE IS LESS THAN 60 INCHES ABOVE THE FLOOR AND ALL GLAZING IN DOORS SHALL BE SAFETY, TEMPERED, OR ACRYLIC PLASTIC SHEET.

11. IF THIS BUILDING IS LOCATED IN A WIND BORNE DEBRIS REGION ALL EXTERIOR GLAZING SHALL BE PROTECTED WITH AN IMPACT RESISTANT COVERING WHICH IS ALSO DESIGNED TO RESIST THE APPLICABLE WIND PRESSURES. THIS COVERING IS DESIGNED BY OTHERS, SITE INSTALLED AND SUBJECT TO LOCAL JURISDICTION APPROVAL.
WIND BORNE DEBRIS REGIONS INCLUDE THE FOLLOWING:
A. AREAS WITHIN ONE MILE OF THE COASTAL MEAN HIGH WATER LINE WHERE THE BASIC WIND SPEED IS EQUAL TO OR GREATER THAN 110 MPH, OR
B. AREAS WHERE THE BASIC WIND SPEED IS EQUAL TO OR GREATER THAN 120 MPH.

12. WHERE THE LIVE LOADS FOR WHICH EACH FLOOR OF PORTION THEREOF IS DESIGNED TO EXCEED 50 PSF, SUCH DESIGN LIVE LOAD SHALL BE CONSPICUOUSLY POSTED BY THE BUILDING OWNER IN THAT STORY WHERE THEY APPLY, USING DURABLE SIGNS.

13. INTERIOR NON-LOADBEARING PARTITIONS SHALL BE MINIMUM 2X4 SPF#3 STUDS AT 16 INCHES ON CENTER.

18. GUARDS ARE REQUIRED AT ALL ROOF EDGES LOCATED WITHIN 10 FEET OF ROOF TOP EQUIPMENT. THE GUARDS SHALL EXTEND NOT LESS THAN 30 INCHES MINIMUM BEYOND THE ENDS OF THE EQUIPMENT AND THE TOP OF THE GUARDS SHALL BE 42 INCHES MINIMUM ABOVE THE ROOF EDGE SURFACE. THE GUARDS SHALL BE CONSTRUCTED SO AS TO PREVENT THE PASSAGE OF A 21 INCH DIAMETER SPHERE AND SHALL COMPLY WITH THE LOADING REQUIREMENTS IN THE INTERNATIONAL BUILDING CODE. GUARDS ARE DESIGNED AND SITE INSTALLED BY OTHERS AND SUBJECT TO LOCAL JURISDICTION APPROVAL.

INDEX OF DRAWINGS:

SITE INSTALLED ITEMS:

NOTE THAT THIS LIST DOES NOT NECESSARILY LIMIT THE ITEMS OF WORK AND MATERIALS THAT MAY BE REQUIRED FOR A COMPLETE INSTALLATION. ALL SITE RELATED ITEMS ARE SUBJECT TO LOCAL JURISDICTION APPROVAL.

1. THE COMPLETE FOUNDATION SUPPORT AND TIE DOWN SYSTEM.
2. RAMPS, STAIRS AND GENERAL ACCESS TO THE BUILDING.
3. PORTABLE FIRE EXTINGUISHER(S).
4. BUILDING DRAINS, CLEANOUTS, AND HOOK-UP TO THE PLUMBING SYSTEM.
5. ELECTRICAL SERVICE HOOK-UP (INCLUDING FEEDERS) TO THE BUILDING.
6. THE MAIN ELECTRICAL PANEL AND SUB-FEEDERS.
7. CONNECTIONS OF ELECTRICAL CIRCUITS CROSSING OVER MODULE MATING LINE(S) - (MULTI-UNITS ONLY).
8. STRUCTURAL AND AESTHETIC INTERCONNECTIONS BETWEEN MODULES (MULTI-UNITS ONLY).
9. EXTERIOR GLAZING PROTECTION.
10. GUTTERS & DOWN SPOUTS WHEN REQUIRED.
11. WATER HEATER THERMAL EXPANSION DEVICE WHEN REQUIRED.
12. PROGRAMMABLE THERMOSTATS IF NOT INSTALLED AT FACTORY.
13. DRINKING FOUNTAIN & SERVICE SINK WHEN NOT SHOWN ON FLOOR PLAN.
14. ALL SIGNS UNLESS OTHERWISE SPECIFIED.
15. FLOOR COVERING MAY BE SITE INSTALLED ON SITE BY OTHERS,
16. T-GRID CEILING AS SHOWN ON PLANS.
17. ROOF MOUNTED HVAC SYSTEM(S) INCLUDING SITE CONNECTIONS AND CURB.
18. VERIFICATION OF ENERGY CODE COMPLIANCE.

ATTENTION LOCAL INSPECTIONS DEPARTMENT:

SET-UP INSTRUCTIONS FOR THIS MODULAR UNIT ARE INCLUDED BY ATTACHMENT TO THESE PLANS. ANY PLAN SET WHICH DOES NOT INCLUDE AN ATTACHMENT ENTITLED "INSTALLATION INSTRUCTIONS" IS INCOMPLETE.

A. SEE CROSS SECTION FOR SITE CONNECTIONS BETWEEN MODULE FLOORS, WALLS, CEILINGS, AND ROOFS OF MULTI-MODULE BUILDINGS.

B. SEE INSTALLATION INSTRUCTIONS PAGES I-2, I-3 & I-9, I-20 & I-21 FOR PLUMBING CONNECTIONS.

C. SEE INSTALLATION INSTRUCTIONS PAGES I-1, I-15, I-22 & I-23 FOR MECHANICAL CONNECTIONS.

D. SEE INSTALLATION INSTRUCTIONS PAGES I-3, I-9, I-16, I-17 & I-18 FOR ELECTRICAL CONNECTIONS.

E. ANY AIR GAPS BETWEEN MODULES AT FLOOR AND CEILING LINES AND ANY OTHERS PENETRATIONS THROUGH THE BUILDING ENVELOPE SHALL BE CAULKED, GASKETED, WEATHER-STRIPPED, WRAPPED OR OTHERWISE SEALED TO LIMIT UNCONTROLLED AIR MOVEMENT.

SEE "SITE INSTALLED ITEMS" FOR ITEMS REQUIRING LOCAL INSPECTION AND APPROVAL. THESE ITEMS HAVE NOT BEEN INSPECTED BY THE THIRD PARTY AGENCY AND ARE NOT CERTIFIED BY THE NORTH CAROLINA MODULAR LABEL.

BUILDING DATA NOTES:

1. CONSTRUCTION IS TYPE V-B.
2. OCCUPANCY IS ASSEMBLY (A-2)/BUSINESS NONSEPARATED MIXED USE.
3. MEANS OF EGRESS IS DESIGNED FOR AN OCCUPANT LOAD OF 1 PERSON PER 100 SQUARE FEET OF GROSS FLOOR AREA FOR OFFICE AREAS, 1 PERSON PER 20 SQUARE FEET OF NET FLOOR AREA FOR TRAINING ROOM AND 1 PERSON PER 15 SQUARE FEET OF NET FLOOR AREA FOR BREAK ROOM.
4. FIRE RATING OF EXTERIOR WALLS IS 0 HOURS.
5. THIS BUILDING REQUIRES A FIRE SEPARATION DISTANCE IN ACCORDANCE WITH TABLE 602 OF THE NCBC AND IS SUBJECT TO LOCAL JURISDICTION APPROVAL.

NORTH CAROLINA STRUCTURAL LOAD LIMITATIONS:

FLOOR LIVE LOAD:
- A. 100 PSF.
- B. 2000# CONCENTRATED LOAD OVER 30 INCH X 30 INCH AREA LOCATED ANYWHERE ON FLOOR.

ROOF LIVE LOAD:
- A. 20 PSF.

ROOF SNOW LOAD:
- A. Pg = 20 PSF — GROUND SNOW LOAD.
- B. Pf = 20 PSF — FLAT-ROOF SNOW LOAD.
- C. Ce = 1.0 — SNOW EXPOSURE FACTOR.
- D. Is = 1.0 — SNOW IMPORTANCE FACTOR.
- E. Ct = 1.1 — SNOW THERMAL FACTOR.
- F. ROOF EXPOSURE — FULLY OR PARTIALLY EXPOSED PER ASCE 7-02.

WIND LOAD:
- A. 130 MPH (NO LIMIT) — WIND SPEED. (MAXIMUM ELEVATION)
- B. Iw = 1.0 — WIND IMPORTANCE FACTOR.
- C. C — WIND EXPOSURE CATEGORY.
- D. GCpi = 0.18 — INTERNAL PRESSURE COEFFICIENT.
- E. Pw = 45.0 PSF — ZONE 5 WALL COMP. & CLADDING.
  Pw = 36.6 PSF — ZONE 4 WALL COMP. & CLADDING.
- F. Pr = 93.0 PSF — ROOF COMPONENT & CLADDING LOAD.
- G. THIS BUILDING IS NOT DESIGNED FOR PLACEMENT ON THE UPPER HALF OF A HILL OR ESCARPMENT EXCEEDING 15 FEET IN HEIGHT.
- H. II — BUILDING CATEGORY PER ASCE 7-02.
- I. ENCLOSED — BUILDING ENCLOSURE CLASSIFICATION.

SEISMIC LOAD:
- A. 1.0 — SEISMIC IMPORTANCE FACTOR.
- B. I — SEISMIC USE GROUP.
- C. Sa = 0.52 — SPECTRAL RESPONSE ACCELERATION.
- D. S1 = 0.12 — SPECTRAL RESPONSE ACCELERATION.
- E. D — SITE CLASS.
- F. Sds = 0.49 — SPECTRAL RESPONSE COEFFICIENT.
- G. Sd1 = 0.19 — SPECTRAL RESPONSE COEFFICIENT.
- H. C — SEISMIC DESIGN CATEGORY.
- I. 1K — SEISMIC FORCE RESISTING SYSTEM.
- J. R = 6.5 — RESPONSE MODIFICATION FACTOR.
- K. SIMPLIFIED — ANALYSIS PROCEDURE.
- L. V = 8,965# — DESIGN BASE SHEAR.

FLOOD LOAD:
THIS BUILDING IS NOT DESIGNED TO BE LOCATED IN A FLOOD HAZARD AREA.

NORTH CAROLINA NOTES:

1. THIS BUILDING HAS NOT BEEN DESIGNED FOR COASTAL HAZARD AREAS, OCEAN HAZARD OR REGULATORY FLOOD PLAIN AREAS.
2. THE CLIMATE ZONE IS 7a.
3. ALL OPAQUE EXTERIOR DOORS SHALL HAVE A U-VALUE OF 0.56 OR LESS.
4. ALL EXTERIOR GLAZING SHALL HAVE A U-VALUE OF 0.7 OR LESS AND A SHGC OF 0.75 OR LESS.
5. THIS BUILDING MUST BE CONNECTED TO A PUBLIC WATER SUPPLY AND SEWER SYSTEM IF THESE ARE AVAILABLE.
6. PIPING IN UNCONDITIONED SPACES MUST BE PROTECTED WITH INSULATION HAVING A MINIMUM R-VALUE OF 6.5 IN ACCORDANCE WITH SECTION 305.6 OF THE NORTH CAROLINA PLUMBING CODE.
7. LAVATORIES SHALL BE OF THE METERING TYPE WHEN LOCATED IN THE FOLLOWING PUBLIC RESTROOMS: a. IN ALL OCCUPANCIES IN RESTROOMS WHICH HAVE 6 OR MORE LAVATORIES; b. IN SCHOOL OCCUPANCIES IN STUDENT-USE RESTROOMS; c. IN ASSEMBLY OCCUPANCIES IN ALL CUSTOMER OR PUBLIC-USE RESTROOMS. METERING LAVATORIES SHALL LIMIT FLOW RATE TO 0.25 GALLONS PER METERING CYCLE.

APPROVED
APR 23 2007
REVIEWED BY: S. FRANCIS
HWCNC, P.C.

CODE SUMMARY:

STATE	BUILDING	ELECTRICAL	MECHANICAL	PLUMBING	ACCESSIBILITY	ENERGY
NORTH CAROLINA	2006 NC	2005 NC W/ 05 AMEND.	2006 NC	2006 NC	ADA, 2002 NC W/ 04 AMEND.	2006 NC

APR 20 2007

DESIGN SPACE, INC.
91 HARVEY VICKERS RD., DOUGLAS, GA. 31533
CLINCH COUNTY IND. PARK, HOMERVILLE, GA. 31634

SOUTHLAND MODULAR
1110 IND. PARK RD.
McRAE, GA. 31055

DATE: 03/26/2007
SCALE : -NTS-
CODES: SEE SUMMARY
LABELS: NC.

KENNETH A. GODFREY, P.E.
CONSULTING ENGINEER
12132 RUSTIC BARN TRAIL
MORGANTON, GA 30560

REVISIONS:

BY: KAG.

DSI 17078 A/E — ASSEMBLY (A-2)

COVER SHEET

KAG. NO. 032207DSI

SHEET 1 OF 1

IBCCN 03/01/07

REV. 8/07

ELECTRICAL NOTES:

1. ALL EQUIPMENT SHALL BE LISTED BY UL FOR THE APPLICATION FOR WHICH IT IS USED AND ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE LISTING.

2. ALL CIRCUITS AND EQUIPMENT SHALL BE GROUNDED IN ACCORDANCE WITH THE APPROPRIATE ARTICLES OF THE NATIONAL ELECTRICAL CODE (NEC).

3. WHEN LIGHT FIXTURES ARE INSTALLED IN CLOSETS THEY SHALL BE SURFACE MOUNTED OR RECESSED. INCANDESCENT FIXTURES SHALL HAVE COMPLETELY ENCLOSED LAMPS. SURFACE MOUNTED INCANDESCENT FIXTURES SHALL HAVE A MINIMUM CLEARANCE OF 12 INCHES AND ALL OTHER FIXTURES SHALL BE A MINIMUM CLEARANCE OF 6 INCHES FROM "STORAGE AREA" AS DEFINED BY NEC 410-8(a).

4. WHEN WATER HEATERS ARE INSTALLED THEY SHALL BE PROVIDED WITH READILY ACCESSIBLE DISCONNECTS ADJACENT TO THE WATER HEATERS SERVED. THE BRANCH CIRCUIT SWITCH OR CIRCUIT BREAKER SHALL BE PERMITTED TO SERVE AS THE DISCONNECTING MEANS ONLY WHERE THE SWITCH OR CIRCUIT BREAKER IS WITHIN SIGHT FROM THE WATER HEATER OR IS CAPABLE OR BEING LOCATED IN THE OPEN POSITION.

5. HVAC EQUIPMENT SHALL BE PROVIDED WITH READILY ACCESSIBLE DISCONNECTS ADJACENT TO THE EQUIPMENT SERVED. A UNIT SWITCH WITH A MARKED "OFF" POSITION THAT IS A PART OF THE HVAC EQUIPMENT AND DISCONNECTS ALL UNGROUNDED CONDUCTORS SHALL BE PERMITTED AS THE DISCONNECTING MEANS WHERE OTHER DISCONNECTING MEANS ARE ALSO PROVIDED BY A READILY ACCESSIBLE CIRCUIT BREAKER.

6. PRIOR TO ENERGIZING THE ELECTRICAL SYSTEM THE INTERRUPTING RATING OF THE MAIN BREAKER MUST BE DESIGNED AND VERIFIED AS BEING IN COMPLIANCE WITH SECTION 110-9 OF THE NEC BY LOCAL ELECTRICAL CONSULTANT.

7. THE MAIN ELECTRICAL PANEL AND FEEDERS ARE DESIGNED BY OTHERS, SITE INSTALLED AND SUBJECT TO LOCAL JURISDICTION APPROVAL.

8. ALL CIRCUITS CROSSING OVER MODULE MATING LINE(S) SHALL BE SITE CONNECTED WITH APPROVED ACCESSIBLE JUNCTION BOXES OR CABLE CONNECTORS.

9. FIRE ALARM PULL STATION OPERABLE DEVICE SHALL BE LOCATED 42 TO 45 INCHES ABOVE THE FLOOR. FIRE ALARM HORN/STROBE DEVISE SHALL BE WALL MOUNTED WITH THE BOTTOM EDGE 80 INCHES ABOVE THE FLOOR.

10. ALL RECEPTACLES INSTALLED IN WET LOCATIONS (EXTERIOR) SHALL BE WEATHER PROOF (WP) ENCLOSURES, THE INTEGRITY OF WHICH IS NOT AFFECTED WHEN AN ATTACHMENT PLUG CAP IS INSERTED OR REMOVED.

11. ALL EXTERIOR LIGHTS SHALL BE EQUIPPED WITH PHOTOCELLS FOR AUTOMATIC SHUT-OFF WHEN DAYLIGHT IS AVAILABLE.

12. EMERGENCY LIGHTING SHALL BE CAPABLE OF PROVIDING INITIAL ILLUMINATION THAT IS AT LEAST AN AVERAGE OF 1 FOOT-CANDLE (fc) AND A MINIMUM OF 0.1 fc MEASURED ALONG THE PATH OF EGRESS AT THE FLOOR LEVEL. ILLUMINATION LEVELS SHALL BE PERMITTED TO DECLINE TO 0.6 fc AVERAGE AND A MINIMUM AT ANY POINT OF 0.06 fc AT THE END OF THE EMERGENCY LIGHT TIME DURATION. A MAXIMUM-TO-MINIMUM ILLUMINATION UNIFORMITY RATIO OF 40 TO 1 SHALL NOT BE EXCEEDED. THE EMERGENCY POWER SYSTEM SHALL PROVIDE POWER FOR A DURATION OF NOT LESS THAN 90 MINUTES.

13. INTERIOR LIGHTING SHALL BE CONTROLLED BY OCCUPANT SENSORS THAT TURN OFF THE LIGHTING WITHIN 30 MINUTES OF AN OCCUPANT LEAVING THE SPACE IN THE EVENT THAT LIGHTING IS NOT SWITCHED OFF BY THE EXITING OCCUPANT(S).

14. WIRING ABOVE T-GRID CEILINGS SHALL BE AC CABLE, MC CABLE OR RUN IN EMT CONDUIT.

15. SITE ELECTRICAL ENGINEER/CONTRACTOR SHALL VERIFY ADEQUACY OF ELECTRIC PANEL(S) DUE TO ANY AND ALL SITE INSTALLED EQUIPMENT (i.e. HVAC UNIT(S), LIGHTS, ETC....).

PLUMBING NOTES:

1. WHEN REQUIRED RESTROOM FACILITIES ARE NOT PROVIDED WITHIN THE BUILDING THEY SHALL BE LOCATED IN AN ADJACENT BUILDING SUBJECT TO LOCAL APPROVAL OR SITE INSTALLED AND SUBJECT TO LOCAL INSPECTION. ALL SITE INSTALLED FACILITIES ARE DESIGNED BY OTHERS. THIS SHALL BE NOTED ON THE BUILDING DATA PLATE.

2. BUILDING OWNER ASSUMES ALL RESPONSIBILITY FOR DRINKING WATER FACILITIES, SERVICE SINK AND ALL OTHER REQUIRED PLUMBING FACILITIES NOT SHOWN ON FLOOR PLAN. ALL BUILDING OWNER PROVIDED FACILITIES ARE DESIGNED BY OTHERS.

3. TOILETS SHALL BE ELONGATED WITH NONABSORBENT OPEN FRONT SEATS.

4. RESTROOM WALLS SHALL BE COVERED WITH NONABSORBENT MATERIAL TO A MINIMUM HEIGHT OF 48 INCHES A.F.F. (70 INCHES MINIMUM IN SHOWERS).

5. ALL PLUMBING FIXTURES SHALL HAVE SEPARATE SHUTOFF VALVES.

6. WATER HEATER SHALL HAVE A T & P RELIEF VALVE WITH DRAIN TO EXTERIOR, AND A SHUTOFF VALVE WITHIN 3 FEET ON THE COLD WATER SUPPLY LINE.

7. DWV SYSTEM SHALL BE EITHER ABS OR PVC -; DWV.

8. WATER SUPPLY LINES SHALL BE POLYBUTYLENE, CPVC, OR COPPER; WHEN POLYBUTYLENE SUPPLY LINES ARE INSTALLED THE MAXIMUM WATER HEATER TEMPERATURE SETTING IN 180°F. THE POLYBUTYLENE PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS LIMITATIONS AND INSTRUCTIONS.

9. ALL PIPE HANGERS SHALL BE NON-METALLIC OR OF THE SAME METAL AS THE PIPE BEING SUPPORTED. ALL SUPPORTS FOR PLASTIC PIPES SHALL PERMIT FREE MOVEMENT AND/OR THERMAL EXPANSION OF THE PIPE. PIPING SUPPORTS SHALL BE SPACED IN ACCORDANCE WITH THE APPLICABLE PLUMBING CODE AND MANUFACTURER'S INSTALLATION INSTRUCTIONS.

10. WATER CLOSETS AND URINALS ARE FLUSH VALVE TYPE UNLESS OTHERWISE SPECIFIED.

11. BUILDING DRAIN AND CLEANOUTS ARE DESIGNED AND SITE INSTALLED BY OTHERS, SUBJECT TO LOCAL JURISDICTION APPROVAL.

12. SHOWERS SHALL BE CONTROLLED BY AN APPROVED MIXING VALVE WITH A MAXIMUM WATER OUTLET TEMPERATURE OF 120°F (48.8°C)

13. THERMAL EXPANSION DEVICE, IF REQUIRED BY WATER HEATED INSTALLED, AND IF NOT SHOWN ON PLUMBING PLAN, IS DESIGNED AND SITE INSTALLED BY OTHERS, SUBJECT TO LOCAL APPROVAL.

14. WATER HEATER STORAGE TANKS SHALL HAVE THE FIRST 8 FEET OF OUTLET PIPING AND THE INLET PIPE BETWEEN THE TANK AND THE HEAT TRAP COVERED WITH 1 INCH THICK INSULATION FOR PIPE DIAMETERS OF 2 INCH OR LESS, AND 1.5 INCH THICK INSULATION FOR PIPE DIAMETERS GREATER THAN 2 INCH.

15. A WATER-HAMMER ARRESTOR SHALL BE INSTALLED WHERE QUICK-CLOSING VALVES ARE UTILIZED, UNLESS OTHERWISE APPROVED. WATER HAMMER ARRESTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.

16. PARTITIONS SEPARATING WATER CLOSETS IN MULTI-STATION RESTROOMS SHALL PROVIDE AT LEAST 12 INCHES OF CLEARANCE FROM THE FLOOR AND CEILING FOR AIR CIRCULATION.

17. URINALS LOCATED IN MULTI-STATION RESTROOMS SHALL HAVE WALLS OR PARTITIONS ON EACH SIDE FOR PRIVACY. THE WALLS OR PARTITIONS SHALL BEGIN AT A HEIGHT NOT MORE THAN 12 INCHES FROM AND EXTEND NOT LESS THAN 60 INCHES ABOVE THE FLOOR SURFACE. THE WALLS OR PARTITIONS SHALL EXTEND A MINIMUM OF 18 INCHES OR TO A POINT NOT LESS THAN 6 INCHES BEYOND THE OUTERMOST LIP OF THE URINAL MEASURED FROM THE BACK WALL SURFACE, WHICHEVER IS GREATER.

MECHANICAL NOTES:

1. ALL SUPPLY AIR REGISTERS SHALL BE 24 INCHES X 24 INCHES ADJUSTABLE WITH 10 INCHES X 20 INCHES (INSIDE) OVERHEAD FIBERGLASS DUCT, UNLESS OTHERWISE SPECIFIED. DUCTS IN ATTICS WITH CEILING INSULATION SHALL HAVE R-6 MINIMUM INSULATION VALUE AND DUCTS IN UNCONDITIONED INTERIOR SPACES SHALL HAVE R-5 MINIMUM INSULATION VALUE.

2. INTERIOR DOORS SHALL BE UNDERCUT 1.5 INCHES ABOVE FINISHED FLOOR FOR AIR RETURN AND OR AS NOTED ON FLOOR PLAN, EXCEPT DOORS LOCATED IN FIRE RATED PARTITIONS SHALL NOT BE UNDERCUT.

3. RESTROOM VENT FANS SHALL PROVIDE 75 CFM OR MORE EXHAUST PER WATER CLOSET OR URINAL, UNLESS OTHERWISE SPECIFIED ON PLANS.

4. VENT FANS SHALL BE DUCTED TO THE EXTERIOR AND TERMINATE AT AN APPROVED VENT CAP.

5. MAXIMUM OCCUPANT LOAD IS 30 FOR BREAK ROOM, 18 FOR TRAINING ROOM AND 11 FOR OFFICE AREAS BASED ON HVAC SYSTEM CAPACITY.

6. HVAC SYSTEM SHALL COMPLY WITH NFPA 90A.

7. THERMOSTATS SHALL BE PROGRAMMABLE AS REQUIRED BY THE APPLICABLE ENERGY CODE. IF PROGRAMMABLE THERMOSTATS ARE NOT INSTALLED IN THE FACTORY THEY SHALL BE PROVIDED BY THE BUILDING OWNER AND SITE INSTALLED BY OTHERS.

8. ROOF MOUNTED HVAC UNIT(S) ARE SITE INSTALLED BY OTHERS IN ACCORDANCE TO PLANS AND ARE SUBJECT TO LOCAL JURISDICTION APPROVAL.

TYPICAL DUCT SIZING:

MAXIMUM TOTAL EFFECTIVE DUCT LENGTH PER SYSTEM = 260 FEET
HEAT STRIP FRICTION LOSS = 0.08
RETURN AIR FILTER FRICTION LOSS = 0.12
FRICTION PER 100 FEET OF DUCT = ((0.6-0.08-0.12) X 100)/260 = 0.15
14 X 16 DUCT GOOD FOR 1800 CFM AT 0.15 IWC > 1720 CFM O.K.
10 X 20 DUCT GOOD FOR 1550 CFM AT 0.15 IWC > 1032 CFM O.K.
10"ø FLEX DUCT GOOD FOR 520 CFM AT 0.15 IWC > 516 CFM O.K.

SYMBOLS

J-BOXES ONLY

- P — FIRE ALARM PULL STATION
- H — FIRE ALARM HORN/STROBE
- S — FIRE ALARM STROBE LIGHT

- DUPLEX RECEPTACLE 120 V.
- DUPLEX RECEPTACLE 120 V. 40 INCHES A.F.F.
- QUADPLEX RECEPTACLE 120 V.
- SINGLE RECEPTACLE 240 V.
- J — JUNCTION BOX (NON POWERED UNLESS CIRCUIT NO. IS SHOWN)
- PJ — POWERED JUNCTION BOX SEE ELECTRICAL PANEL SCHEDULES FOR DETAILS
- T — PROGRAMMABLE THERMOSTAT
- VENT FAN (375 CFM)
- 24"x24" SUPPLY AIR REGISTER
- 24"x24" RETURN AIR REGISTER
- COMBO INTERNALLY LIGHTED EXIT SIGN (5 W.) & EMERGENCY LIGHT WITH BATTERY BACKUP
- INTERNALLY LIGHTED EXIT SIGN (5 W.) WITH BATTERY BACKUP
- OS — OCCUPANT SENSOR
- SWITCH W/ OCCUPANT SENSOR OPERATES TWO OUTER LAMPS
- SWITCH W/ OCCUPANT SENSOR OPERATES MIDDLE INNER LAMP
- FLUORESCENT FIXTURE T8 WITH 3- 32W TUBES W/ ELECTRONIC BALLAST
- FLUORESCENT FIXTURE T8 WITH 2- 32W TUBES W/ ELECTRONIC BALLAST NIGHT/EMERGENCY LIGHT WITH BATTERY BACKUP WIRED DIRECT TO PANEL & SWITHCED BY SWD TYPE BREAKER
- INCANDESCENT LIGHT WITH 1- 60 W. BULB
- EMERGENCY LIGHT WITH BATTERY BACKUP

WINDOW AND DOOR ABBREVIATIONS:

3680 = 36 INCHES X 80 INCHES (TYPICAL)

VS = VERTICAL SLIDER, SINGLE OR DOUBLE HUNG

HS = HORIZONTAL SLIDER

OBS = OBSCURE GLAZING

E OR EGRESS = EGRESS WINDOW COMPLYING WITH THE APPLICABLE BUILDING AND/OR LIFE SAFETY CODE

HD = HEAVY DUTY

ALUM = ALUMINUM INSULATED DOOR

ST/ST = STEEL INSULATED DOOR

VB = VIEW BLOCK

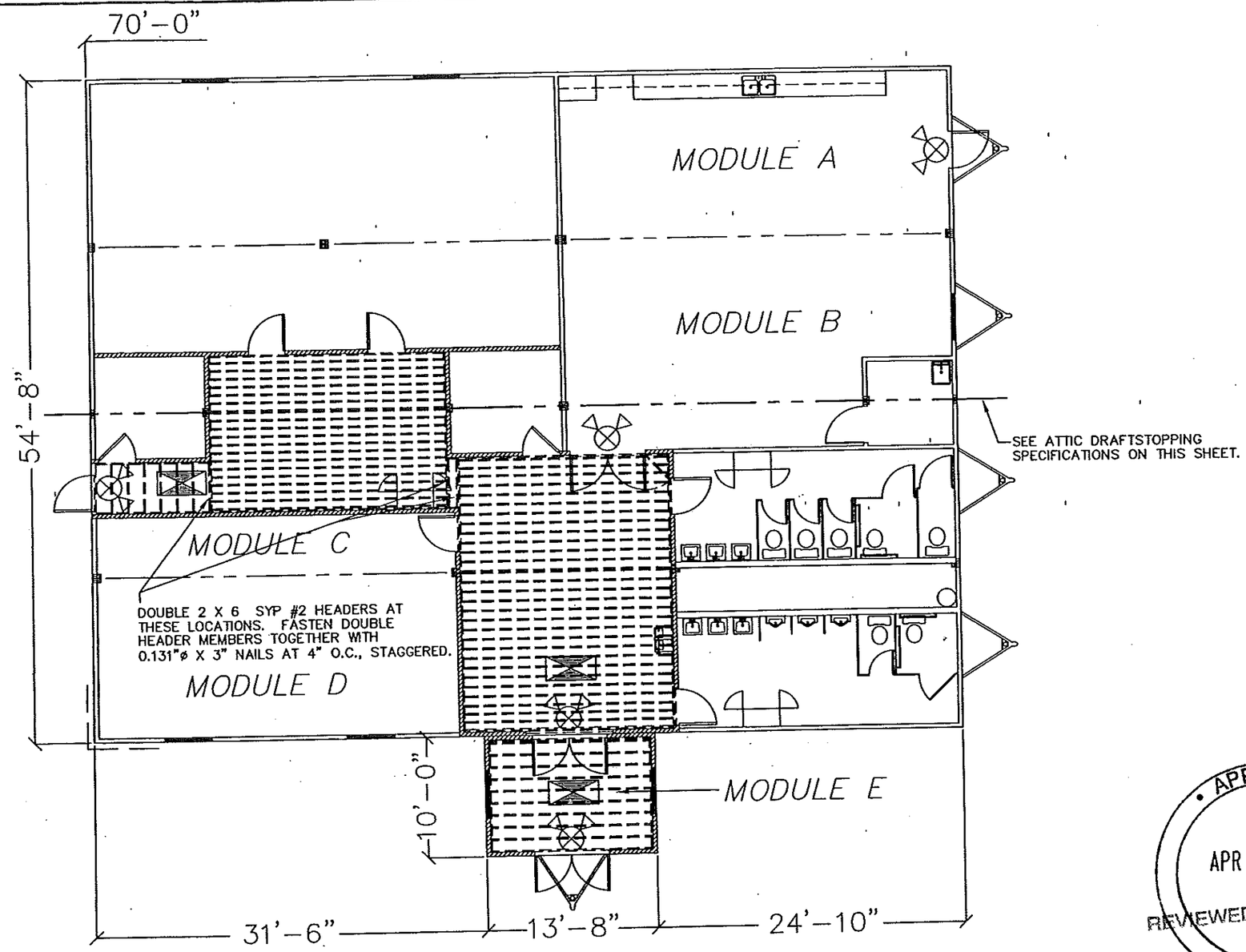
SLG = SLIDING GLASS DOOR

APPROVED
APR 23 2007
REVIEWED BY: S. FRANCIS
HW [illegible] P.C.

APR 20 2007

DESIGN SPACE, INC. 91 HARVEY VICKERS RD., DOUGLAS, GA. 31533 CLINCH COUNTY IND. PARK, HOMERVILLE, GA. 31634		SOUTHLAND MODULAR 1110 IND. PARK RD. McRAE, GA. 31055
DATE: 03/26/2007	KENNETH A. GODFREY, P.E. CONSULTING ENGINEER 12132 RUSTIC BARN TRAIL MORGANTON, GA 30560	
SCALE : -NTS-	REVISIONS:	BY: KAG.
CODES: SEE SUMMARY		
LABELS: NC.		SHEET 2 OF
DSI 17078 A/E	ASSEMBLY (A-2)	
ELECTRICAL, PLUMBING & MECHANICAL NOTES, ETC.	KAG. NO. 032207DSI	

SCALE: 02/19/07



KEY PLAN
-NTS.-

ATTIC DRAFTSTOPPING SPECIFICATIONS:

1. SEE FLOOR PLAN FOR REQUIRED DRAFTSTOPPING LOCATIONS.
2. DRAFTSTOPPING MATERIAL SHALL BE MINIMUM 1/2" GYPSUM BOARD, 3/8" PLYWOOD OR 7/16" OSB.
3. DRAFTSTOPPING LOCATED PARALLEL TO TRUSS SPANS SHALL BE INSTALLED ON ONE SIDE OF TRUSSES AT THAT LOCATION.
4. DRAFTSTOPPING LOCATED PERPENDICULAR TO THE TRUSS SPANS SHALL BE INSTALLED AT THE MATE LINE.
5. ALL EDGES SHALL BE TIGHTLY FIT, INCLUDING THE ANNULAR SPACE AROUND MECHANICAL AND ELECTRICAL PENETRATIONS, SO AS TO PREVENT THE PASSAGE OF AIR.
6. THE ATTIC SPACE ON EACH SIDE OF DRAFTSTOPPING SHALL BE SEPARATELY VENTILATED.
7. DRAFTSTOPPING MATERIAL SHALL EXTEND FROM ROOF SHEATHING TO T-GRID CEILING. MATERIAL BETWEEN TRUSSES AND T-GRID MAY BE SITE INSTALLED.

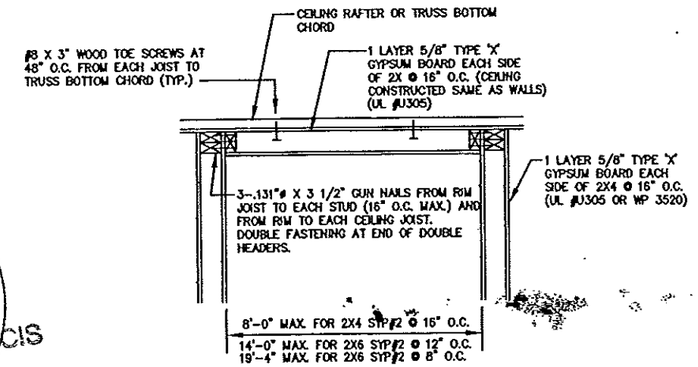
PENETRATION OF FIRE RESISTANT WALLS AND CEILING:

1. COMBUSTIBLE CABLES AND WIRES, COMBUSTIBLE PIPES, TUBES, AND CONDUIT SHALL MEET TESTING REQUIREMENTS OF ASTM E119 AS PART OF THE FIRE RESISTANT ASSEMBLY OR SHALL HAVE THROUGH-PENETRATION FIRESTOP SYSTEMS LISTED AND TESTED AS PER ASTM E814 AND BE TESTED AT A POSITIVE PRESSURE DIFFERENTIAL BETWEEN THE EXPOSED AND UNEXPOSED SURFACES OF NOT LESS THAN .01 INCH OF WATER AND HAVE AN F RATING OF AT LEAST 1 HOUR BUT NOT LESS THAN THE RATING OF THE ASSEMBLY.
2. CABLES AND WIRES WITHOUT COMBUSTIBLE INSULATIONS AND NONCOMBUSTIBLE PIPES, TUBES, AND CONDUITS SHALL BE PROTECTED AS DESCRIBED ABOVE OR SHALL HAVE THE ANNULAR SPACE FILLED WITH A MATERIAL MEETING THE REQUIREMENT OF ASTM E119 TESTED UNDER A MINIMUM POSITIVE PRESSURE DIFFERENTIAL OF .01 INCH OF WATER FOR A TIME PERIOD EQUIVALENT TO THE RATING OF THE ASSEMBLY.
3. ELECTRICAL BOXES SHALL BE METAL OR LISTED FOR USE IN FIRE RESISTANT ASSEMBLIES AND SHALL NOT EXCEED 16 SQUARE INCHES. BOXES ON OPPOSITE SIDES OF FIRE RESISTANT WALLS SHALL BE SEPARATED BY A MINIMUM HORIZONTAL DISTANCE OF 24 INCHES.
4. ALL CEILING FIXTURES SHALL BE SURFACE MOUNTED.
5. DUCTS PENETRATING FIRE RESISTANT CEILINGS SHALL HAVE AN ACCESSIBLE LISTED CEILING RADIATION DAMPER COMPLYING WITH THE REQUIREMENTS OF UL 555C LOCATED IN LINE WITH THE CEILING MEMBRANE OF THE ASSEMBLY.
6. ALL FIRE RATED DOORS SHALL HAVE LISTED DOOR, FRAME, AND HARDWARE NO LESS THAN THE TIME RATING SPECIFIED ON THE FLOOR PLAN. IN ADDITION FIRE RATED DOORS SHALL BE EQUIPPED WITH SELF CLOSERS UNLESS OTHERWISE SPECIFIED.

WOOD STUD WALLS: 1 HOUR PER UL NO. U305 – 1 LAYER 5/8" TYPE 'X' GYPSUM EACH SIDE OF WALL.

EXCEPTION: USE GYPSUM ASSOC. FILE NO. WP 3520 ON WALLS WHERE THE 5/8" TYPE 'X' GYPSUM BOARD HAS A PREDECORATED OR VINYL COVERED FINISH AND FASTEN IT WITH 6d COATED NAILS, 1 7/8" LONG, 0.0915" SHANK, 1/4" HEADS, 7" O.C. AT JOINTS AND TOP AND BOTTOM PLATES AND 3/8" BEAD OF ADHESIVE AT INTERMEDIATE STUDS.

CEILING: 1 HOUR PER UL NO. U305 – 1 LAYER 5/8" TYPE 'X' GYPSUM BOARD EACH SIDE, WITH BUTT JOINTS STAGGERED. CEILING CONSTRUCTED SAME AS WALL.

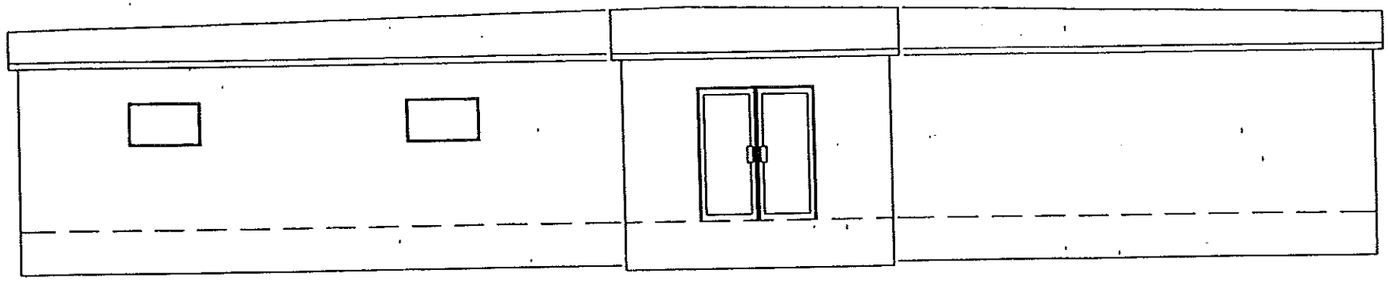


ONE HOUR WALLS & CEILING
TYPICAL FOR CORRIDOR/FOYER WALLS & CEILING
-NTS.-

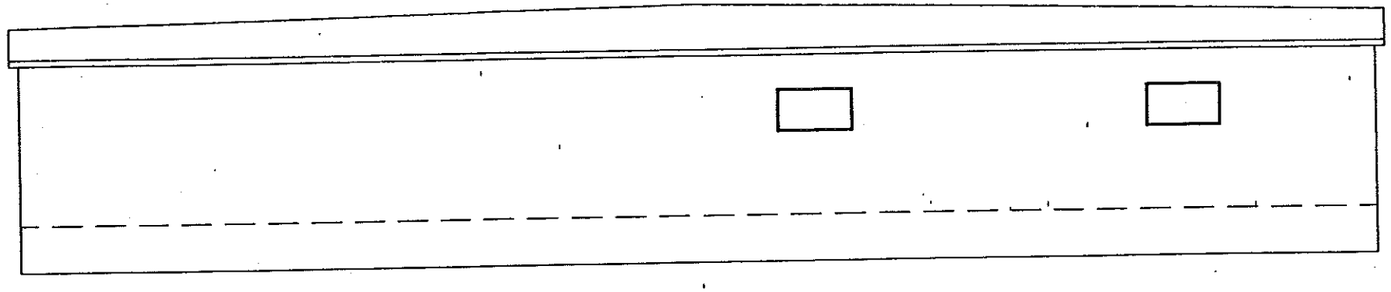
APPROVED
APR 23 2007
REVIEWED BY: S. FRANCIS
HWCNC, P.C.

APR 20 2007

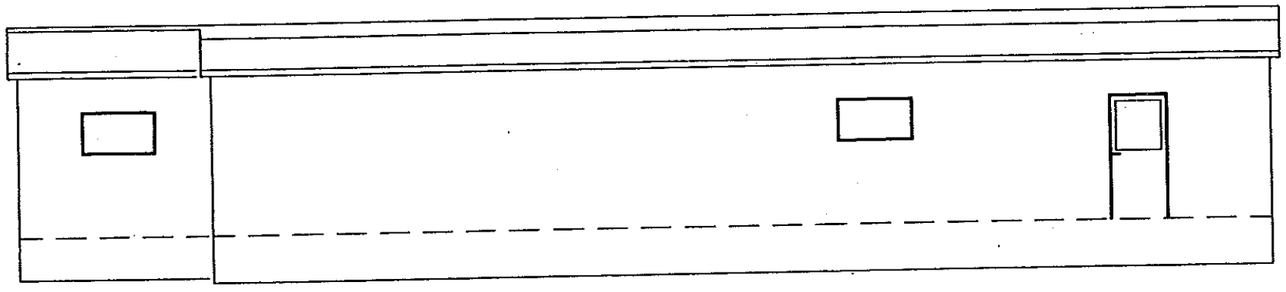
DESIGN SPACE, INC. 91 HARVEY WOKERS RD., DOUGLAS, GA. 31533 CLINCH COUNTY IND. PARK, HOMERVILLE, GA. 31634		SOUTHLAND MODULAR 1110 IND. PARK RD. McRAE, GA. 31055
DATE: 03/26/2007	KENNETH A. GODFREY, P.E. CONSULTING ENGINEER 12132 RUSTIC BARN TRAIL MORGANTON, GA 30560	
SCALE : -NTS-		
CODES: SEE SUMMARY	REVISIONS:	BY:
LABELS: NC.		KAG.
DSI 17078 A/E	ASSEMBLY (A-2)	SHEET 3 OF 15
KEY PLAN AND ATTIC DRAFTSTOPPING	KAG. NO. 032207DSI	



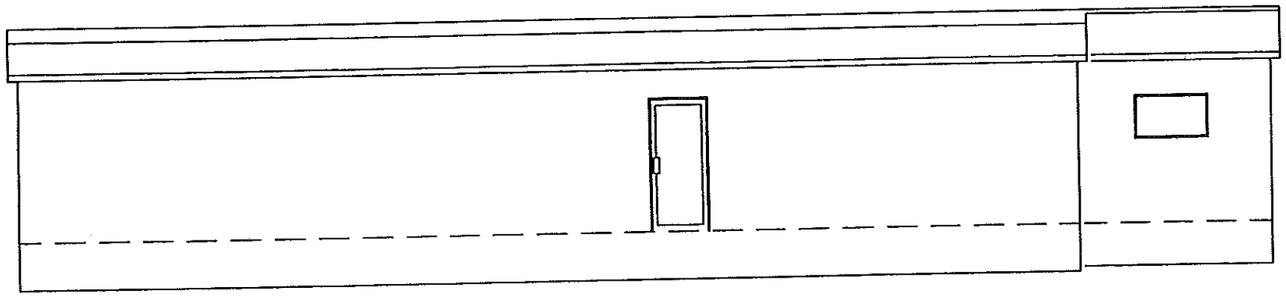
FRONT ELEVATION



REAR ELEVATION



RIGHT ELEVATION



LEFT ELEVATION

TYPICAL ELEVATION NOTES:

1. ALL SITE INSTALLED ITEMS ARE SUBJECT TO THE APPROVAL OF THE JURISDICTION HAVING AUTHORITY.

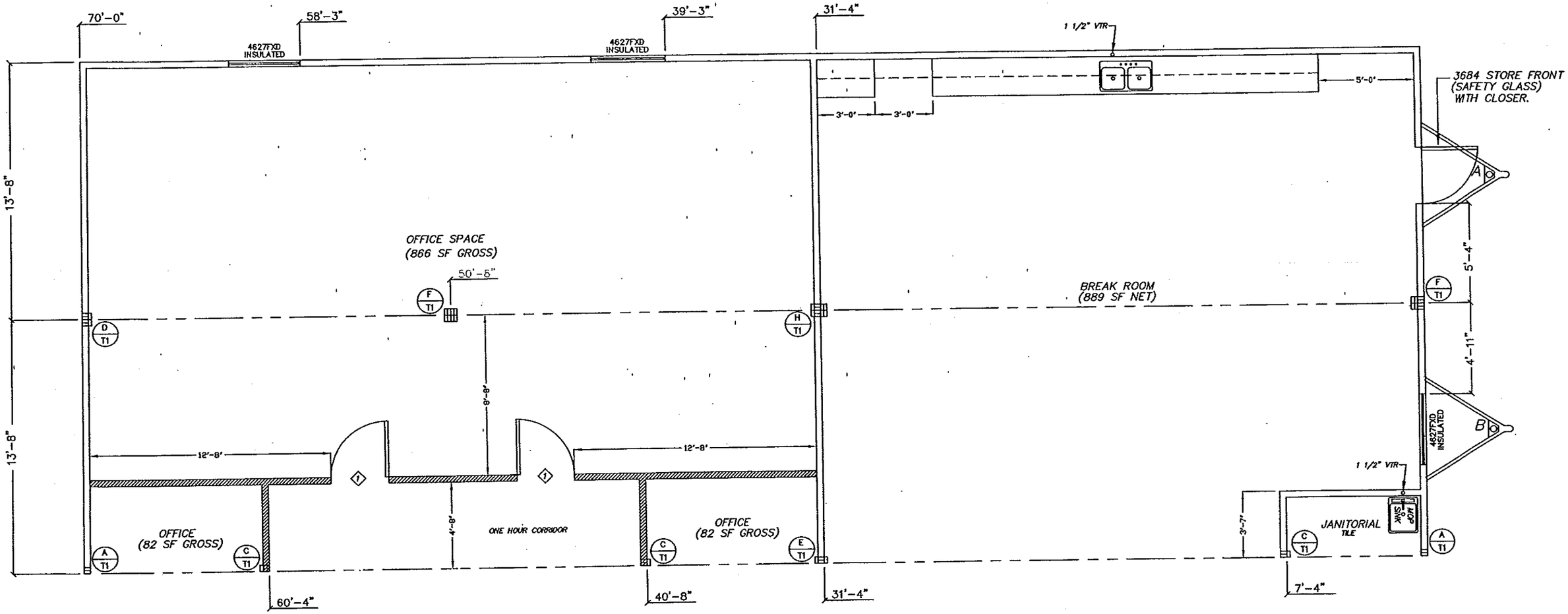
2. ACCESSIBLE RAMP(S), STAIR(S), AND HANDRAILS ARE DESIGNED BY OTHERS AND SITE INSTALLED.

3. FOUNDATION ENCLOSURE (IF PROVIDED) IS DESIGNED BY OTHERS AND SITE INSTALLED. ENCLOSURE MUST HAVE A MINIMUM NET AREA OF VENTILATION OPENINGS OF NOT LESS THAN ONE SQUARE FOOT FOR EACH 150 SQUARE FEET OF CRAWL SPACE AREA. LOCATE OPENINGS TO PROVIDE CROSS VENTILATION OF ENTIRE CRAWL SPACE. INSTALL AN 18" X 24" MINIMUM OPENING FOR CRAWL SPACE ACCESS.

APPROVED
APR 23 2007
REVIEWED BY: S. FRANCIS
HWCNC, P.C.

APR 20 2007

DESIGN SPACE, INC. 91 HARVEY VICKERS RD., DOUGLAS, GA. 31533 CLINCH COUNTY IND. PARK, HOMERVILLE, GA. 31634		SOUTHLAND MODULAR 1110 IND. PARK RD. McRAE, GA. 31055
DATE: 03/26/2007	KENNETH A. GODFREY, P.E. CONSULTING ENGINEER 12132 RUSTIC BARN TRAIL MORGANTON, GA 30560	
SCALE : -NTS.-	REVISIONS:	BY: KAG.
CODES: SEE SUMMARY LABELS: NC.		
DSI 17078 A/E	ASSEMBLY (A-2)	SHEET 4 OF 1
ELEVATIONS	KAG. NO. 032207DSI	



1 3680 20 MINUTE RATED ASSEMBLY AND SELF CLOSER.

REQUIRED ONE HOUR FIRE RATED WALLS.

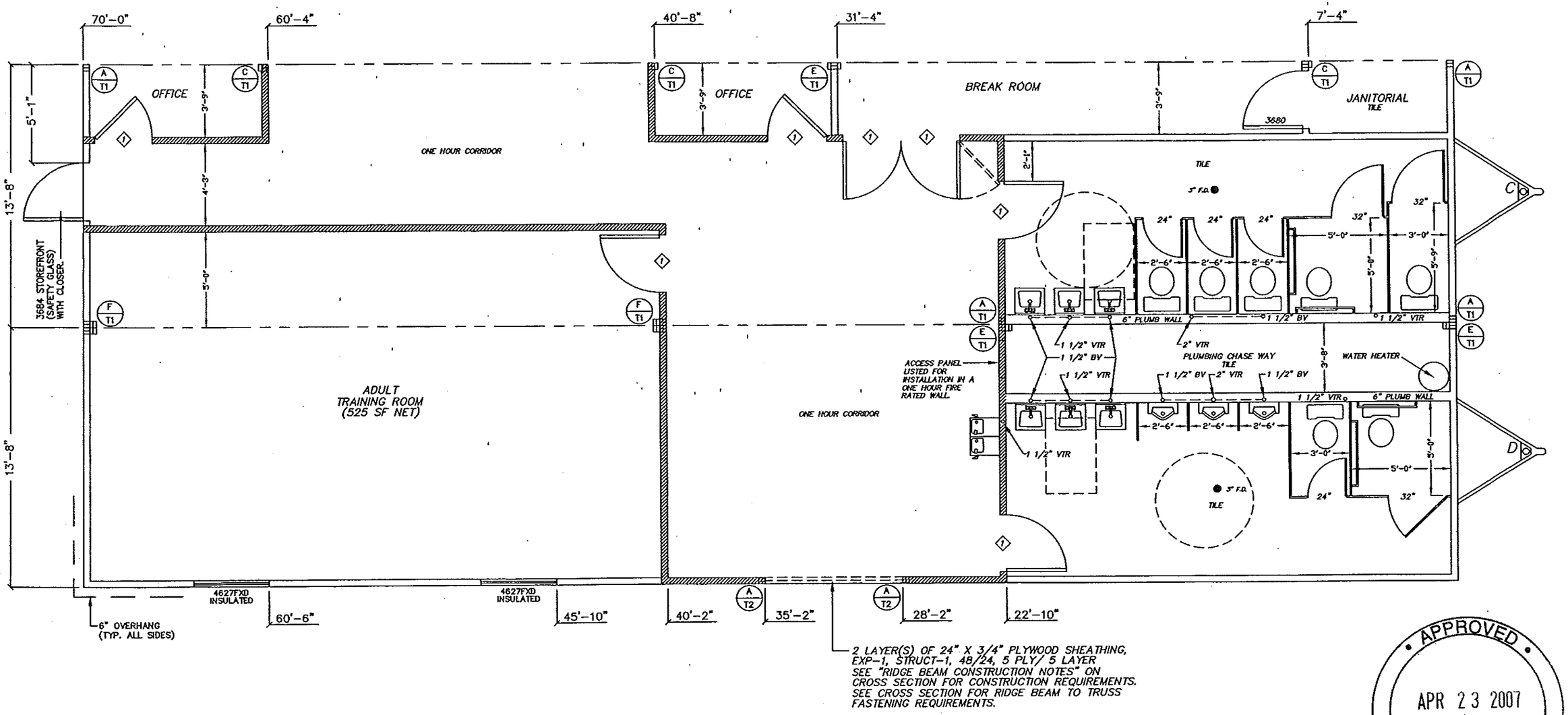
COLUMN STRAPPING LEGEND:

1. SEE SHEET 10 OF 15 FOR DETAILS.

APPROVED
APR 23 2007
REVIEWED BY: S. FRANCIS
HWCNC, P.C.

APR 20 2007

DESIGN SPACE, INC. 91 HARVEY WICKERS RD., DOUGLAS, GA. 31533 CLINCH COUNTY IND. PARK, HOMERVILLE, GA. 31634	SOUTHLAND MODULAR 1110 IND. PARK RD. McRAE, GA. 31055
DATE: 03/26/2007	KENNETH A. GODFREY, P.E. CONSULTING ENGINEER 12132 RUSTIC BARN TRAIL MORGANTON, GA 30560
SCALE : 3/16" = 1'-0"	
CODES: SEE SUMMARY	REVISIONS: BY: KAG.
LABELS: NC.	
DSI 17078 A/E	ASSEMBLY (A-2) SHEET 5 OF 1
FLOOR PLAN MODULES A/B	KAG. NO. 0322070SI



◇1 3680 20 MINUTE RATED ASSEMBLY AND SELF CLOSER.

REQUIRED ONE HOUR FIRE RATED WALLS.

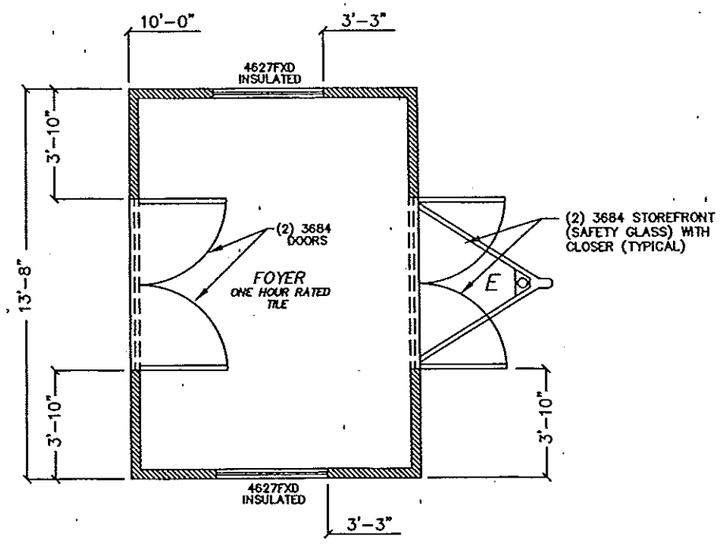
COLUMN STRAPPING LEGEND:

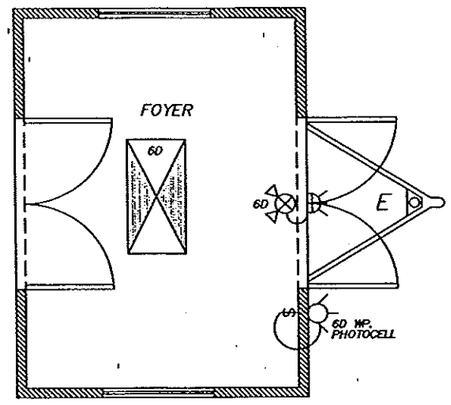
1. SEE SHEET 10 OF 15 FOR DETAILS.

APPROVED
APR 23 2007
REVIEWED BY: S. FRANCIS
HWCNC, P.C.

APR 20 2007

DESIGN SPACE, INC. 91 HARVEY WICKERS RD., DOUGLAS, GA. 31533 CLINCH COUNTY IND. PARK, HOMERVILLE, GA. 31634		SOUTHLAND MODULAR 1110 IND. PARK RD. McRAE, GA. 31055
DATE: 03/26/2007	KENNETH A. GODFREY, P.E. CONSULTING ENGINEER 12132 RUSTIC BARN TRAIL MORGANTON, GA 30560	
SCALE : 3/16" = 1'-0"		
CODES: SEE SUMMARY	REVISIONS:	BY: KAG.
LABELS: NC.		
DSI 17078 A/E	ASSEMBLY (A-2)	SHEET 6 OF 15
FLOOR PLAN MODULES C/D	KAG. NO. 032207DSI	





REQUIRED ONE HOUR FIRE RATED WALLS.

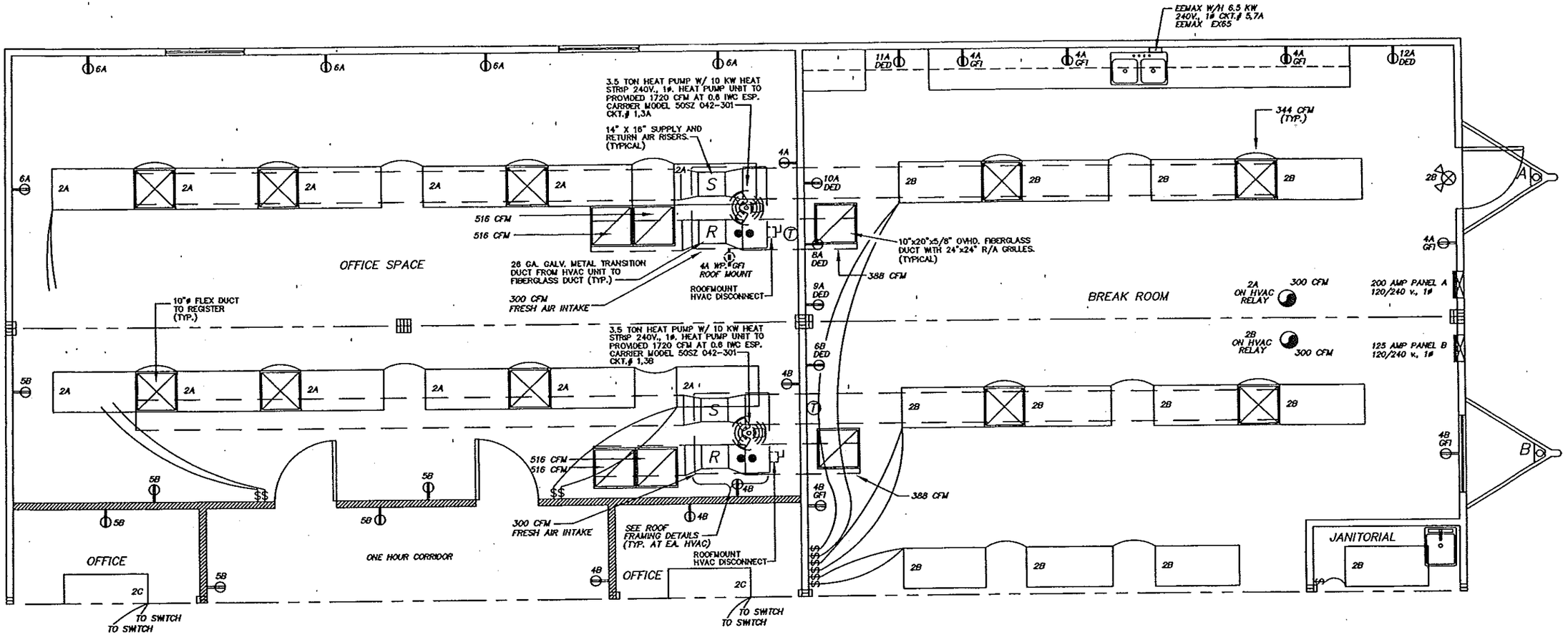
COLUMN STRAPPING LEGEND:

1. SEE SHEET 10 OF 15 FOR DETAILS.

APPROVED
APR 23 2007
REVIEWED BY: S. FRANCIS
HWCNC, P.C.

APR 20 2007

DESIGN SPACE, INC. 91 HARVEY VICKERS RD., DOUGLAS, GA. 31533 CLINCH COUNTY IND. PARK, HOMERVILLE, GA. 31634		SOUTHLAND MODULAR 1110 IND. PARK RD. McRAE, GA. 31055
DATE: 03/26/2007	KENNETH A. GODFREY, P.E. CONSULTING ENGINEER 12132 RUSTIC BARN TRAIL MORGANTON, GA 30560	
SCALE : 3/16" = 1'-0"		
CODES: SEE SUMMARY	REVISIONS:	BY: KAG.
LABELS: NC.		
DSI 17078 A/E ASSEMBLY (A-2)		SHEET 7 OF 15
FLOOR//ELECTRICAL PLAN MODULE E	KAG. NO. 032207DSI	



ELECTRICAL SCHEDULE 'A'				ELECTRICAL SCHEDULE 'B'			
CIRCUIT	NOMENCLATURE	BREAKER (AMPS)	WIRE (CU.)	CIRCUIT	NOMENCLATURE	BREAKER (AMPS)	WIRE (CU.)
1,3A	HVAC *	SIZE PER MFG SPECS		1,3B	HVAC *	SIZE PER MFG SPECS	
5,7A	W/H	30 A (2P)	10-2 NM	---	W/H	20 A (1P)	12-2 NM
4,6A	RECEPTACLES	20 A	12-2 NM	2B	LIGHTING	20 A	12-2 AC
8-12A	DEDICATED CIRCUIT 1.9 KW 120V., 1Ø	20 A (1P)	12-2 NM	4,5B	RECEPTACLES	20 A	12-2 NM
2A	LIGHTING	20 A	12-2 AC	6B	DEDICATED CIRCUIT 1.9 KW 120V., 1Ø	20 A (1P)	12-2 NM

ELECTRICAL PANEL SIZING:		ELECTRICAL PANEL SIZING:	
DESCRIPTION	SUBPANEL 'A' KVA	DESCRIPTION	SUBPANEL 'B' KVA
GENERAL LIGHTING .0035 KW/SF X 855 SF X 1.25=	3.7	GENERAL LIGHTING .0035 KW/SF X 997 SF X 1.25=	4.4
11 RECEPTS AT 180VA/1000=	2.0	12 RECEPTS AT 180VA/1000=	2.2
WATER HEATER 6.5 KW =	6.5	WATER HEATER __ KW =	---
1 FANS AT .3 KW X 1.25=	0.4	1 FANS AT .3 KW X 1.25=	0.4
HVAC *	19.2	HVAC *	19.2
(5) DED. CKT'S AT 1.9 KW X 1.25=	11.9	(1) DED. CKT. AT 1.9 KW X 1.25=	2.4
TOTAL 43.7 KW *		TOTAL 28.6 KW *	
TOTAL/240 X 1000= 182 AMPS *		TOTAL/240 X 1000= 119 AMPS *	
INSTALL 200 AMP PANEL & MAIN BREAKER 120/240 V 1Ø		INSTALL 125 AMP PANEL & MAIN BREAKER 120/240 V 1Ø	

* ROOF MOUNTED HVAC UNIT(S) ARE SITE INSTALLED BY OTHERS IN ACCORDANCE TO PLANS AND ARE SUBJECT TO LOCAL JURISDICTION APPROVAL, THEREFORE THE SITE ELECTRICAL ENGINEER/CONTRACTOR SHALL VERIFY ADEQUACY OF ELECTRIC PANEL(S).

APPROVED
APR 23 2007
REVIEWED BY: S. FRANCIS
HVAC/MC P.C.

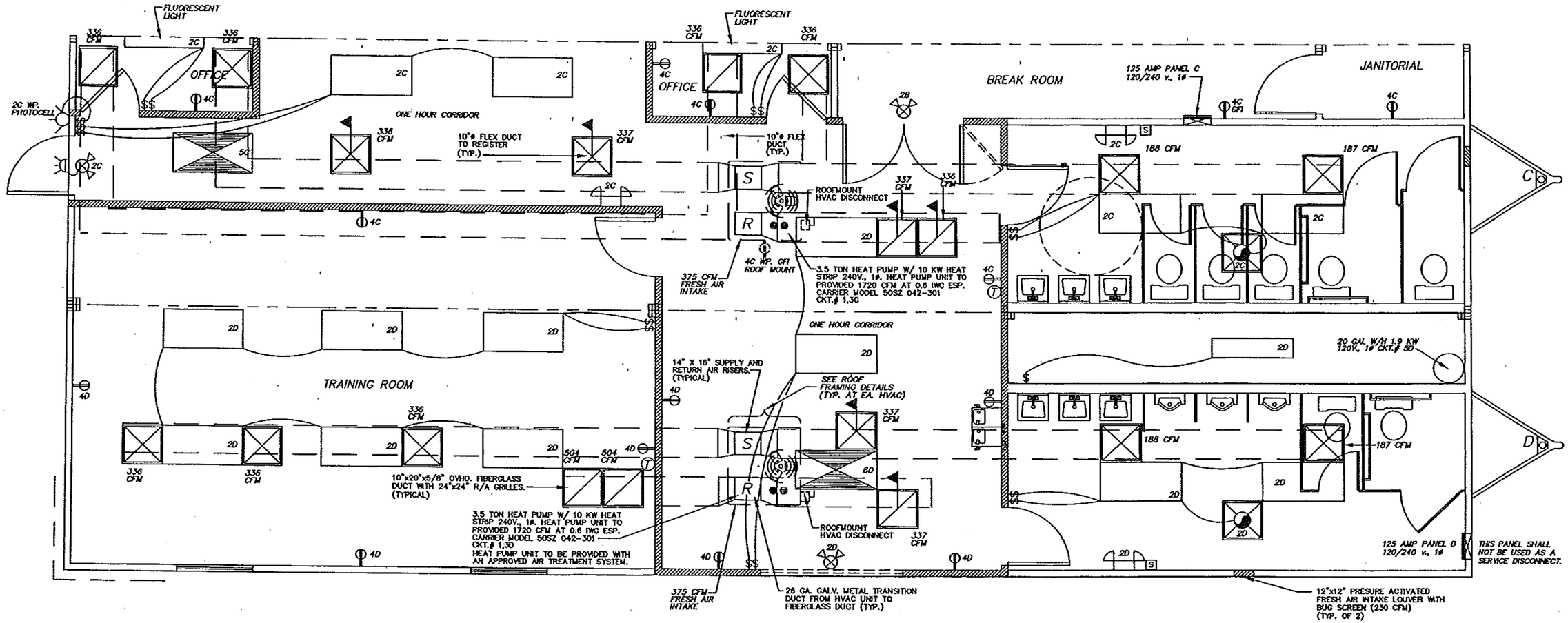
▼ UL LISTED CEILING RADIATION DAMPER

NOTE:
1. ALL DUCT SIZES ARE INSIDE DIMENSIONS (INCHES)
2. FLEX = FLEXIBLE DUCT (DO NOT USE FLEX DUCT CONNECTOR)

●● HVAC UNIT(S) SHALL BE PROVIDED WITH FRESH AIR INTAKE. FRESH AIR INTAKES SHALL BE LOCATED A MIN. OF 10 FEET AWAY FROM ALL PLUMBING VENTS AND EXHAUST VENTS UNLESS SUCH VENTS ARE LOCATED A MIN. OF 2 FEET ABOVE THE FRESH AIR INTAKE OPENING.
HVAC UNIT(S) & CURB(S) ARE SITE INSTALLED BY OTHERS, SUBJECT TO LOCAL APPROVAL.

APR 20 2007

DESIGN SPACE, INC. 91 HARVEY VICKERS RD., DOUGLAS, GA. 31533 CLINCH COUNTY IND. PARK, HOMERVILLE, GA. 31634	SOUTHLAND MODULAR 1110 IND. PARK RD. McRAE, GA. 31055	
DATE: 03/26/2007	KENNETH A. GODFREY, P.E. CONSULTING ENGINEER 12132 RUSTIC BARN TRAIL MORGANTON, GA 30560	
SCALE : 3/16" = 1'-0"		
CODES: SEE SUMMARY	REVISIONS:	BY: KAG.
LABELS: NC.		
DSI 17078 A/E	ASSEMBLY (A-2)	SHEET 8 OF 15
ELECTRICAL/MECHANICAL PLAN MODULES A/B	KAG. NO. 032207DSI	



UL LISTED CEILING RADIATION DAMPER

NOTE:
1. ALL DUCT SIZES ARE INSIDE DIMENSIONS (INCHES)
2. FLEX = FLEXIBLE DUCT (DO NOT USE FLEX DUCT CONNECTOR)

HVAC UNIT(S) SHALL BE PROVIDED WITH FRESH AIR INTAKE. FRESH AIR INTAKES SHALL BE LOCATED A MIN. OF 10 FEET AWAY FROM ALL PLUMBING VENTS AND EXHAUST VENTS UNLESS SUCH VENTS ARE LOCATED A MIN. OF 2 FEET ABOVE THE FRESH AIR INTAKE OPENING.
HVAC UNIT(S) & CURB(S) ARE SITE INSTALLED BY OTHERS, SUBJECT TO LOCAL APPROVAL.

ELECTRICAL SCHEDULE 'C'			
CIRCUIT	NOMENCLATURE	BREAKER (AMPS)	WIRE (CU.)
1,3C	HVAC *	SIZE PER MFG SPECS	
--	W/H	20 A (2P)	12-2 NM
2,5C	LIGHTING	20 A	12-2 AC
4C	RECEPTACLES	20 A	12-2 NM

ELECTRICAL PANEL SIZING:	
DESCRIPTION SUBPANEL 'C'	KVA
GENERAL LIGHTING	
.0035 KW/SF X 694 SF X 1.25=	3.1
8 RECEPTS AT 180VA/1000=	1.5
WATER HEATER __ KW =	--
1 FANS AT .3 KW X 1.25=	0.4
HVAC *	19.2
OTHER	--
TOTAL 24.2 KW *	
TOTAL/240 X 1000= 101 AMPS *	
INSTALL 125 AMP PANEL & MAIN BREAKER 120/240 V 1ø	

ELECTRICAL SCHEDULE 'D'			
CIRCUIT	NOMENCLATURE	BREAKER (AMPS)	WIRE (CU.)
1,3D	HVAC *	SIZE PER MFG SPECS	
5D	W/H	20 A (1P)	12-2 NM
2,6D	LIGHTING	20 A	12-2 AC
4D	RECEPTACLES	20 A	12-2 NM

ELECTRICAL PANEL SIZING:	
DESCRIPTION SUBPANEL 'D'	KVA
GENERAL LIGHTING	
.0035 KW/SF X 1419 SF X 1.25=	6.3
7 RECEPTS AT 180VA/1000=	1.3
WATER HEATER 1.9 KW X 1.25=	2.4
1 FANS AT .3 KW X 1.25=	0.4
HVAC *	19.2
OTHER	--
TOTAL 29.6 *	
TOTAL/240 X 1000= 123 AMPS *	
INSTALL 125 AMP PANEL & MAIN BREAKER 120/240 V 1ø	

* ROOF MOUNTED HVAC UNIT(S) ARE SITE INSTALLED BY OTHERS IN ACCORDANCE TO PLANS AND ARE SUBJECT TO LOCAL JURISDICTION APPROVAL, THEREFORE THE SITE ELECTRICAL ENGINEER/CONTRACTOR SHALL VERIFY ADEQUACY OF ELECTRIC PANEL(S).

APPROVED
APR 23 2007
REVIEWED BY: S. FRANCIS
HWCNC, P.C.

APR 20 2007

DESIGN SPACE, INC.
91 HARVEY VICKERS RD., DOUGLAS, GA. 31533
CLINCH COUNTY IND. PARK, HOMERVILLE, GA. 31634

SOUTHLAND MODULAR
1110 IND. PARK RD.
McRAE, GA. 31055

DATE: 03/26/2007
SCALE : 3/16" = 1'-0"
CODES: SEE SUMMARY
LABELS: NC.

KENNETH A. GODFREY, P.E.
CONSULTING ENGINEER
12132 RUSTIC BARN TRAIL
MORGANTON, GA 30560

REVISIONS:

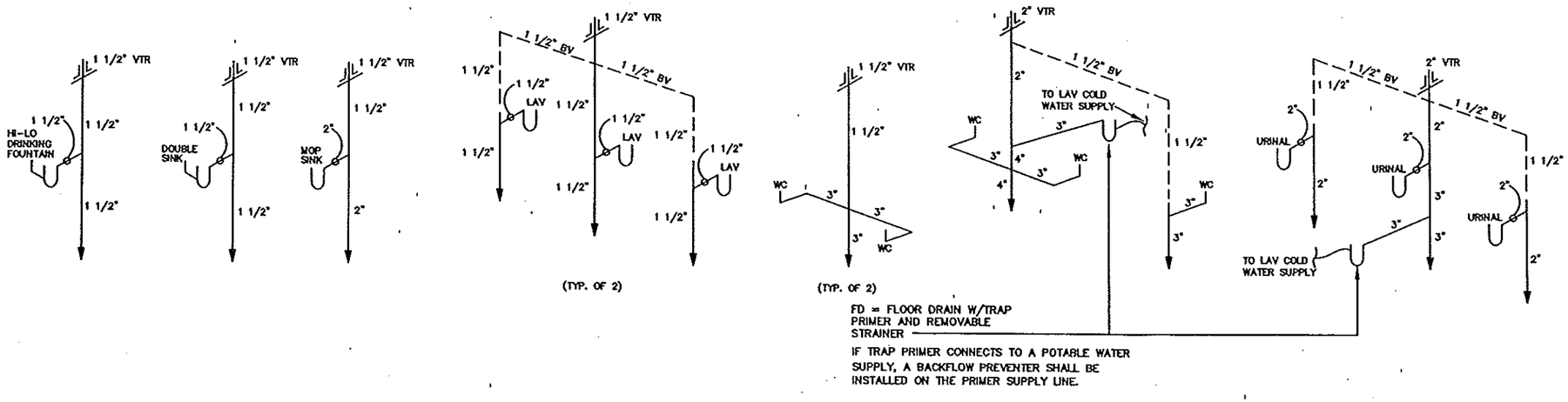
BY: KAG.

DSI 17078 A/E ASSEMBLY (A-2)

ELECTRICAL/MECHANICAL PLAN
MODULES C/D

KAG. NO. 032207DSI

SHEET 9 OF 15

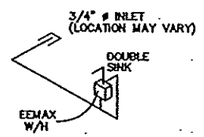


DWV RISER
-NTS.-

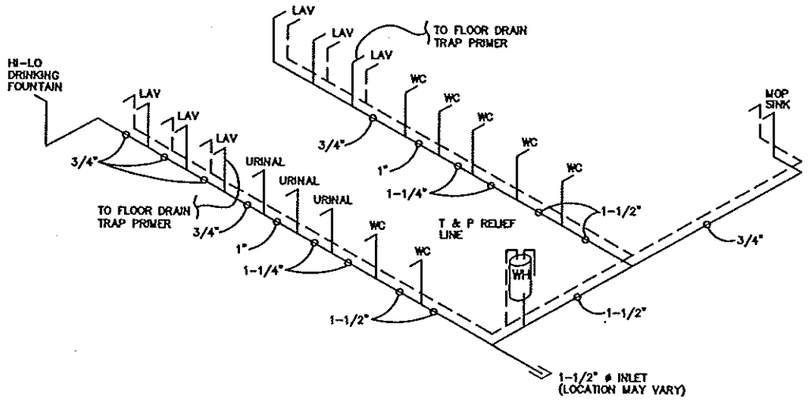
SUPPLY LINE SIZING IS BASED ON AN ASSUMED AVAILABLE PRESSURE OF 46 TO 60 PSI AT MAIN INLET AND A MAXIMUM DEVELOPED LENGTH 80 FEET TO THE MAIN INLET AND SHOULD BE VERIFIED PRIOR TO CONSTRUCTION.

———— COLD
- - - - - - HOT

ALL SUPPLY LINES SHALL BE 3/4", UNLESS OTHERWISE SPECIFIED.
ALL STUB-UPS TO WC'S SHALL BE 1",
ALL STUB-UPS TO URINALS SHALL BE 3/4",
ALL OTHER STUB-UPS SHALL BE 1/2".



SUPPLY RISER
MODULE A
-NTS.-



SUPPLY RISER
MODULE B THRU D
-NTS.-

COLUMN & COLUMN STRAPPING LEGEND	
A / T1	INDICATES TYPE OF STUD / INDICATES TYPE OF TIE DOWN STRAP
✳	INDICATES WITH RIDGE BEAM BEARING STIFFENER (SEE RIDGE BEAM NOTES FOR SPECIFICATIONS)

COLUMN DESCRIPTIONS			
A	(2) 2x4 SYP #2 THIS HALF.	B	(2) 2x4 SYP #2 EACH HALF
C	(3) 2x4 SYP #2 THIS HALF.	D	(3) 2x4 SYP #2 EACH HALF.
E	(4) 2x4 SYP #2 THIS HALF.	F	(4) 2x4 SYP #2 EACH HALF.
G	(5) 2x4 SYP #2 THIS HALF.	H	(5) 2x4 SYP #2 EACH HALF.

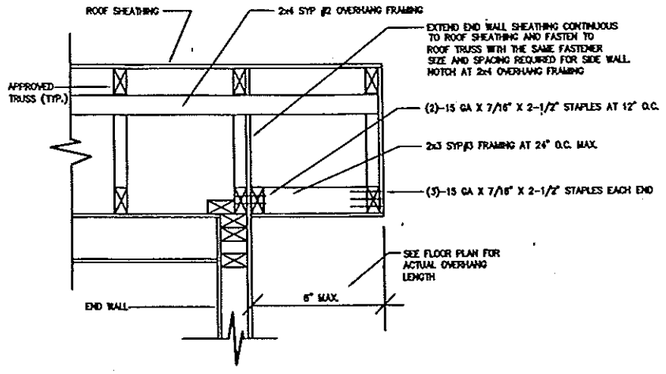
NOTES:
1. ALL COLUMN STUDS SHALL BE NAILED TOGETHER PER NDS AND FASTENED TOGETHER WITH 100% PVA GLUE COVERAGE.
2. COLUMN STUDS SHALL NOT BE NOTCHED OR BORED.
3. INSTALL ONE TIE DOWN STRAP FROM RIDGE BEAM TO COLUMN AND FROM COLUMN TO FLOOR RIM JOIST FOR EACH STUD OF COLUMN. (ie: 4 STUD COLUMN WILL REQUIRE 4 TIE DOWN STRAPS)
4. STRAPS SHALL NOT BE OVERLAPPED OR DOUBLED UNLESS SPECIFIED OTHERWISE.

TIE DOWN STRAP DESCRIPTIONS	
T1	20 GA X 1-1/2" GALV. STEEL STRAP WITH (6) 0.148"ø X 3" NAILS EACH END. TWO 26 GA X 1.5" GALV. STEEL STRAPS MAY BE SUBSTITUTED FOR ONE 20 GA X 1-1/2" STRAP. NAILS MUST PENETRATE 2" MINIMUM INTO ALL MEMBERS. PENETRATION MAY BE REDUCED TO 1-1/2" IF 8 NAILS ARE USED IN LIEU OF 6. IN NO CASE SHALL SPLITTING OF WOOD BE PERMITTED.
T2	26 GA X 1-1/2" GALV. STEEL STRAP WITH (6) 14 GA X 7/16" X 1" STAPLES EACH END. 15 GA STAPLES MAY BE USED IF QUANTITY IS INCREASED TO (7) STAPLES.

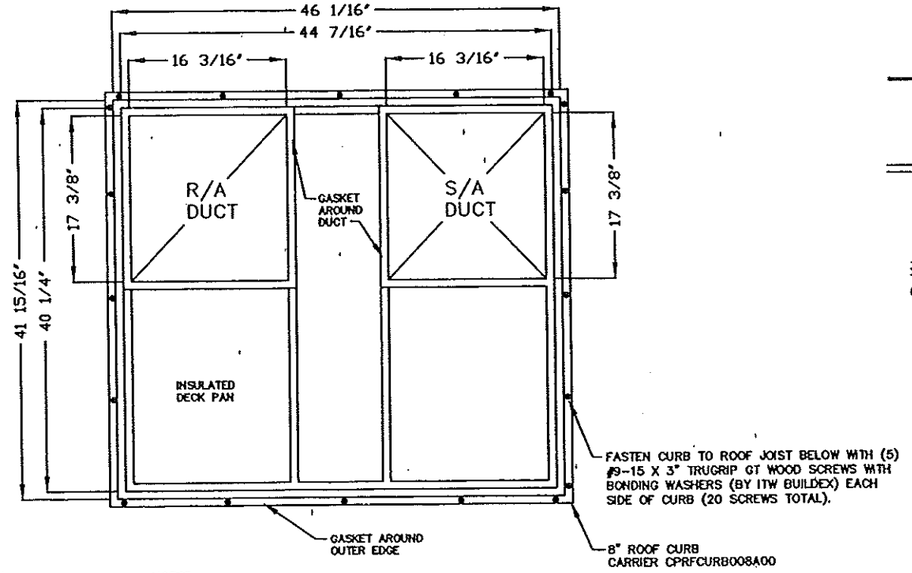
APPROVED
APR 23 2007
REVIEWED BY: S. FRANCIS
HWCNC, P.C.

APR 20 2007

DESIGN SPACE, INC. 91 HARVEY VICKERS RD., DOUGLAS, GA. 31533 CLINCH COUNTY IND. PARK, HOMERVILLE, GA. 31634		SOUTHLAND MODULAR 1110 IND. PARK RD. McRAE, GA. 31055
DATE: 03/26/2007	KENNETH A. GODFREY, P.E. CONSULTING ENGINEER 12132 RUSTIC BARN TRAIL MORGANTON, GA 30560	
SCALE : -NTS-		
CODES: SEE SUMMARY	REVISIONS:	BY: KAG.
LABELS: NC.		
DSI 17078 A/E	ASSEMBLY (A-2)	SHEET 10 OF 15
PLUMBING RISERS AND COLUMN STRAPPING LEGEND	KAG. NO. 032207DSI	

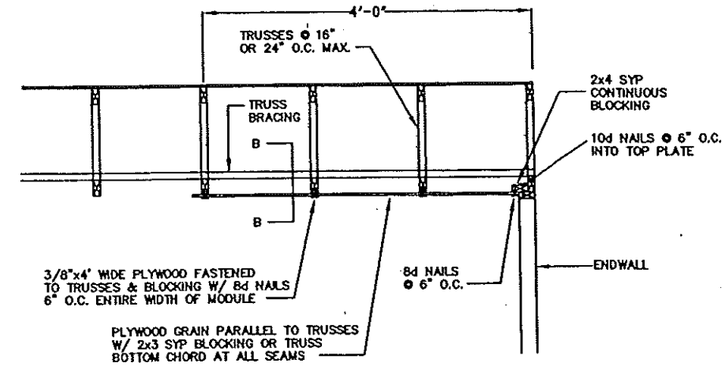


SECTION O-O
-NTS-

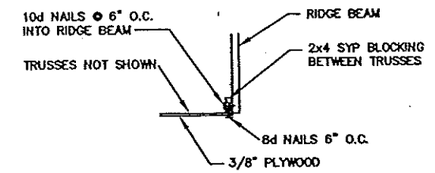


NOTES:
1. ROOF CURB IS MADE OF 16 GA. STEEL.
2. INSULATED PANELS: 1 INCH THICK FIBERGLASS 1 LB. DENSITY.
3. SEE MANUFACTURER'S SPECIFICATIONS FOR MORE DETAILS.

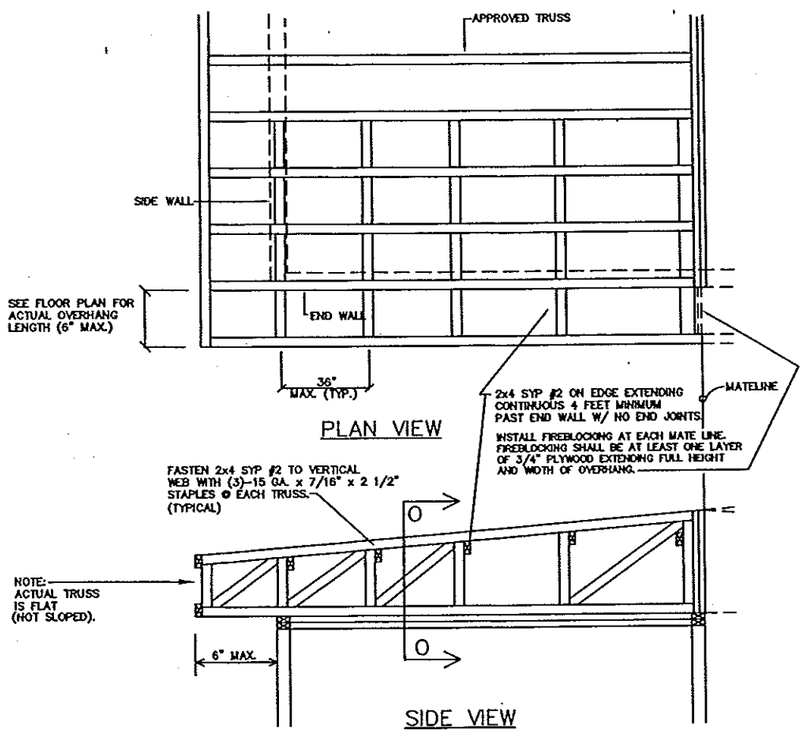
HVAC ROOF CURB
PLAN VIEW DETAIL
SCALE: 3/4" = 1'-0"



SECTION A-A
(TYP. EACH ENDWALL)



SECTION B-B
(TYP. AT RIDGE BEAM)

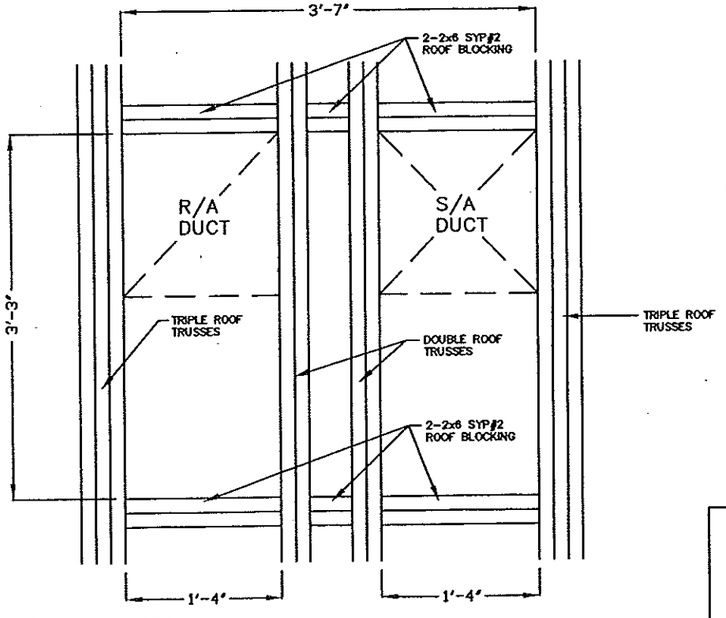


PLAN VIEW

SIDE VIEW

NOTE:
1. 2x4 SYP #2 OVERHANG FRAMING MAY BE TURNED FLAT AND FASTENED TO TRUSS TOP CHORDS IN LIEU OF TRUSS WEBS PROVIDED MAXIMUM SPACING BETWEEN FRAMING MEMBERS IS REDUCED 50%.
2. OVERHANG FRAMING SPACING MAY BE INCREASED PROVIDED THE TRIBUTARY SPAN OF ANY INDIVIDUAL 2x4 IS NOT EXCEEDED.
3. THIS DESIGN IS BASED ON A ROOF ANGLE OF LESS THAN 7°.

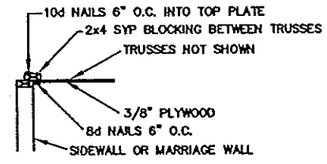
END WALL/SIDE WALL OVERHANG DETAIL
-NTS-



NOTES:
1. DOUBLE BLOCKING MAY BE INSTALLED BLIND AND TOE NAILED WITH 10d x 1-1/2" NAILS EACH END OF EACH MEMBER.

HVAC ROOF FRAMING
PLAN VIEW DETAIL
SCALE: 3/4" = 1'-0"

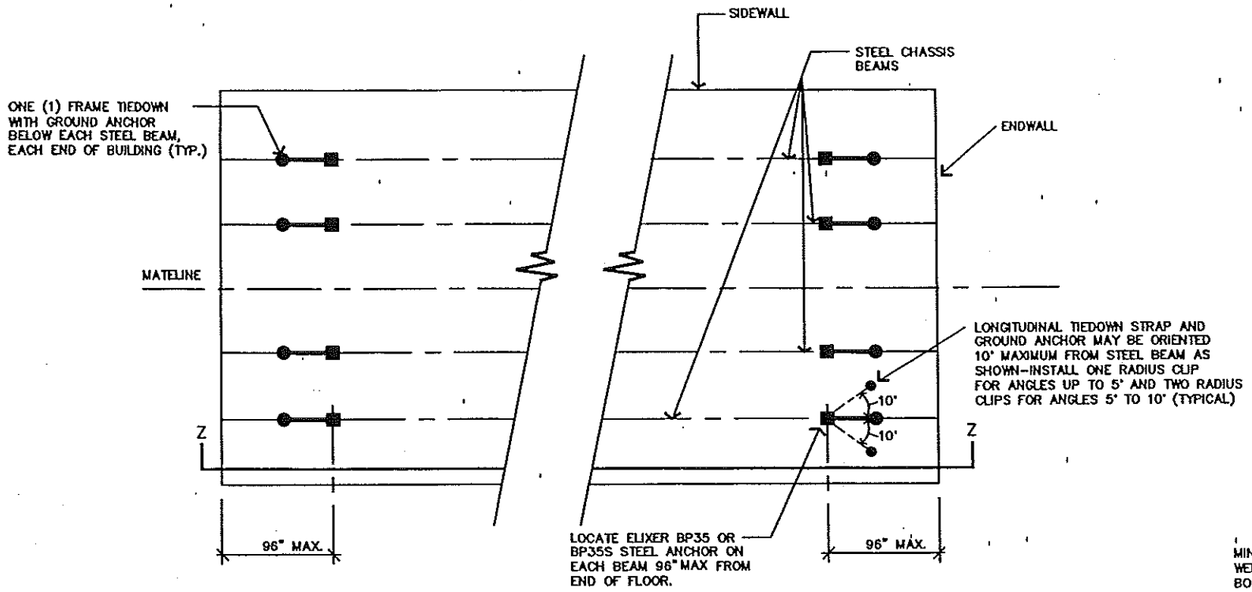
APPROVED
APR 23 2007
REVIEWED BY: S. FRANCIS
HWCNC, P.C.



SECTION B-B
(TYP. EACH SIDEWALL & MARRIAGE WALL)

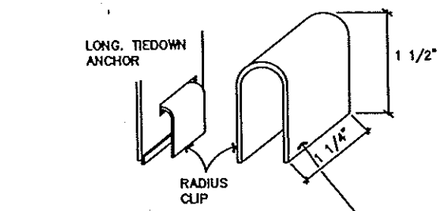
APR 20 2007

DESIGN SPACE, INC. 91 HARVEY WICKERS RD., DOUGLAS, GA. 31533 CLINCH COUNTY IND. PARK, HOMERVILLE, GA. 31634	SOUTHLAND MODULAR 1110 IND. PARK RD. McRAE, GA. 31055
DATE: 03/26/2007	KENNETH A. GODFREY, P.E. CONSULTING ENGINEER 12132 RUSTIC BARN TRAIL MORGANTON, GA 30560
SCALE : -NTS-	
CODES: SEE SUMMARY	REVISIONS: BY: KAG.
LABELS: NC.	
DSI 17078 A/E — ASSEMBLY (A-2)	SHEET 11 OF 15
HVAC ROOF FRAMING, ROOF CURB, AND ROOF OVERHANG DETAILS	KAG. NO. 032207DSI



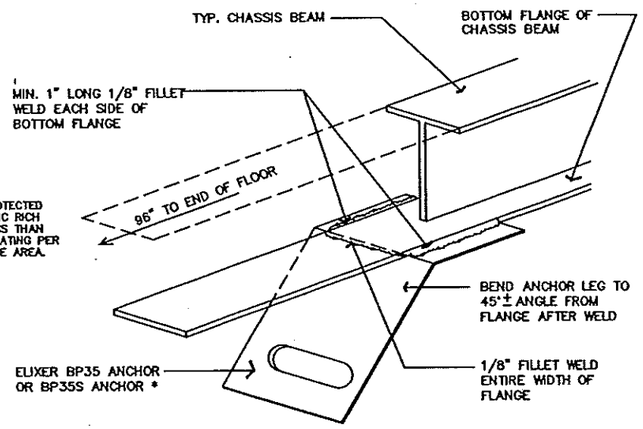
PLAN VIEW

NOTE: DOUBLE WIDE BUILDING IS SHOWN BUT DETAIL IS APPLICABLE TO ALL BUILDING SIZES REGARDLESS OF NUMBER OF MODULES.



TIEDOWN RADIUS CLIP

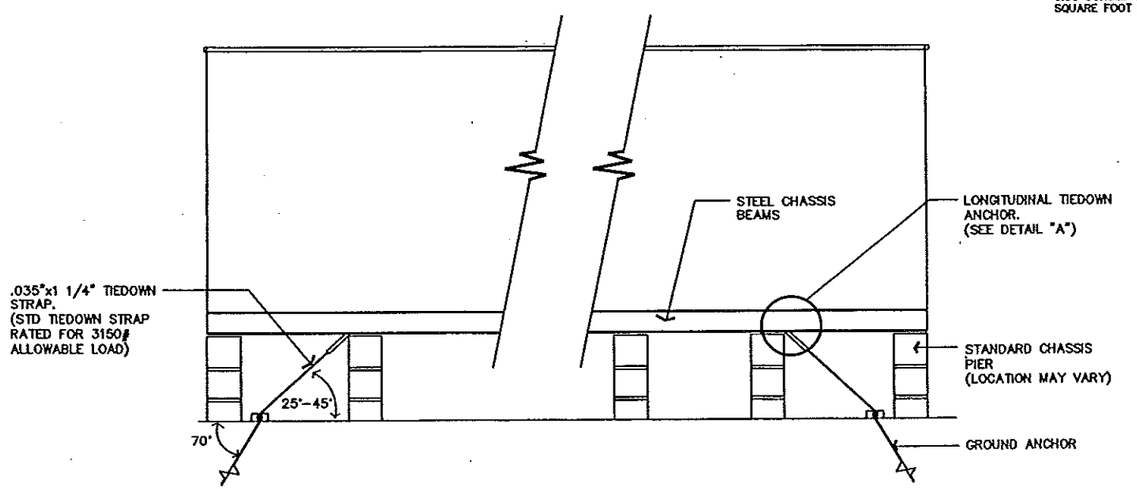
INSTALLER TO FABRICATE RADIUS CLIP BY PLACING STRAIGHT 3" LENGTH OF 1 1/4"x.035" TIEDOWN STRAP IN ANCHOR SLOT AND MANUALLY BENDING THE STRAP TO THE CONFIGURATION SHOWN.



DETAIL A

NOTE:
ALL WELDS SHALL BE PROTECTED WITH EXTERIOR GRADE ZINC RICH PAINT PROVIDING NOT LESS THAN 0.30 OUNCES OF ZINC COATING PER SQUARE FOOT OF SURFACE AREA.

* IN LIEU OF THE ELIXER ANCHOR SPECIFIED ABOVE, "LONGITUDINAL FRAME BEAM CLAMPS" BY TIE DOWN ENGINEERING, INC. MAY BE USED. IF USED, THEY SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH TEST REPORT 99-M103-TDE BY K2 ENGINEERING, INC. WHEN USED, TWO GROUND ANCHORS AND TIE DOWN STRAPS ARE REQUIRED AT EACH CLAMP LOCATIONS. ONE STRAP SHALL BE INSTALLED ON EACH SIDE OF THE I-BEAM AT EACH CLAMP LOCATION. EACH STRAP SHALL BE OFF SET 10° FROM THE DIRECTION PARALLEL TO THE I-BEAM AS SHOWN IN THE PLAN VIEW ON THIS PAGE.



SECTION Z-Z

APPROVED
APR 23 2007
REVIEWED BY: S. FRANCIS
HWCNC, P.C.

APR 20 2007

DESIGN SPACE, INC. 91 HARVEY WICKERS RD., DOUGLAS, GA. 31533 CLINCH COUNTY IND. PARK, HOMERVILLE, GA. 31634	SOUTHLAND MODULAR 1110 IND. PARK RD. McRAE, GA. 31055	
DATE: 03/26/2007	KENNETH A. GODFREY, P.E. CONSULTING ENGINEER 12132 RUSTIC BARN TRAIL MORGANTON, GA 30560	
SCALE : -NTS-		
CODES: SEE SUMMARY	REVISIONS:	BY: KAG.
LABELS: NC.		
DSI 17078 A/E ASSEMBLY (A-2)		SHEET 12 OF 15
FOUNDATION LONGITUDINAL TIE-DOWN DETAILS	KAG. NO. 032207DSI	

2LONGTIE 01/19/05

FOUNDATION NOTES:

1. THIS FOUNDATION PLAN IS PROVIDED FOR REFERENCE AS A TYPICAL STANDARD. ACTUAL FOUNDATION CONDITIONS MUST BE EVALUATED FOR APPLICABILITY IF THIS PLAN IS TO BE USED. ALTERNATE FOUNDATION PLANS MAY BE DESIGNED BY OTHERS IN ACCORDANCE WITH THE REQUIREMENTS OF THE JURISDICTION HAVING AUTHORITY. IF FOUNDATION PLANS ARE DESIGNED BY OTHERS, THE ENGINEER OF THE BUILDING PLANS SHALL NOT BE HELD RESPONSIBLE OR LIABLE FOR THE FOUNDATION DESIGN AND THE CONSEQUENTIAL PERFORMANCE OF THE SUPERSTRUCTURE'S STRUCTURAL COMPONENTS AND SYSTEMS RELATED THERETO.

2. ALL FOUNDATION CONSTRUCTION MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL CODES.

3. TIE-DOWN STRAPS TO BE 1-1/4" X .035" TYPE-1, FINISH B, GRADE 1 ZINC COATED STEEL STRAPPING CERTIFIED BY A REGISTERED ENGINEER OR ARCHITECT AS CONFORMING WITH ASTM D3953-91. TIE DOWN STRAPS AND CONNECTING HARDWARE SHALL HAVE 3150# MINIMUM WORKING CAPACITY.

4. EACH GROUND ANCHOR SHALL HAVE A WORKING CAPACITY NO LESS THAN THE SUM OF THE REQUIRED WORKING CAPACITIES OF ALL TIE DOWN STRAPS CONNECTED TO THE GROUND ANCHOR, AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS, DESIGN OF GROUND ANCHOR, INCLUDING SHAFT LENGTH, NUMBER AND DIAMETER OF HELIXES, ETC, TO BE AS SPECIFIED BY THE GROUND ANCHOR MANUFACTURER FOR THE ACTUAL SOIL TYPE ENCOUNTERED. IF THE HOLDING OR PULLOUT CAPACITIES OF GROUND ANCHORS ARE BELOW THE ASSUMED DESIGN VALUES, THE ARCHITECT/ENGINEER MUST BE CONSULTED FOR AN ALTERNATED ANCHORAGE DESIGN.

5. EXCAVATE AN ADDITIONAL 1 TO 2 INCHES AT BOTTOM AND SIDES OF ALL FOOTINGS THAT ARE POURED DIRECTLY AGAINST EARTH.

6. ALL PIERS SHALL BE CONSTRUCTED OF 8" X 8" X 16" STANDARD WEIGHT CONCRETE MASONRY UNITS CONFORMING TO ASTM C90 HAVING A COMPRESSIVE STRENGTH fm' = 2000 PSI MINIMUM. MASONRY UNITS SHALL BE LAID IN TYPE M OR S MORTAR OR COVERED WITH SURFACE BONDING CEMENT COMPLYING WITH ASTM C887 AND APPLIED IN STRICT ACCORDANCE WITH THE CEMENT MANUFACTURER'S INSTRUCTIONS, WITH THE BOTTOM COURSE LAID IN TYPE M OR S MORTAR. REINFORCEMENT BARS AND PIER FOOTINGS SHALL BE DESCRIBED IN THE PIER DETAILS.

7. CONCRETE SHALL BE STANDARD WEIGHT (150 PCF) WITH A MINIMUM COMPRESSIVE STRENGTH 3000 PSI AT 28 DAYS.

8. ALL REINFORCEMENT BARS SHALL COMPLY WITH ASTM A615, GRADE 60. REINFORCEMENT BARS SHALL BE UNCOATED DEFORMED BARS (NO EPOXY). REINFORCEMENT BARS SHALL BE EQUALLY SPACED AND PLACED WITH 3" CLEARANCE FROM BOTTOM AND SIDES OF THE FOOTING. AT SPLICES LAP ALL #4 BARS 24 INCHES MINIMUM AND LAP ALL #5 BARS 30 INCHES MINIMUM. OFF SET ALL SPLICES 30 INCHES MINIMUM.

9. ALL PIERS SHALL BE CAPPED WITH A 4" SOLID CONCRETE OR MASONRY CAP, FULL LENGTH OF PIER. PIERS SHALL PROVIDE A TRUE AND EVEN BEARING SURFACE.

10. THE CENTERLINE OF EACH PIER SHALL BE LOCATED DIRECTLY BELOW THE I-BEAM CENTERLINE WITH 1 INCH MAXIMUM TOLERANCE.

11. SOIL BEARING CAPACITY SHOWN ON THIS PLAN IS ASSUMED. IF THE ACTUAL SOIL BEARING CAPACITY IS LESS THAN 2000 PSF, THE ENGINEER MUST BE CONSULTED FOR REQUIRED ALTERNATE FOUNDATION DESIGN. FOOTINGS SHALL BE PLACED ON NON-EXPANSIVE SOILS ONLY.

12. WHEN CONTINUOUS PERIMETER SUPPORT IS NOT PROVIDED, INSTALL A TYPICAL I-BEAM TYPE PIER ON EACH SIDE OF ALL EXTERIOR DOOR OPENINGS. (MANUFACTURER'S RECOMMENDATION ONLY- OPTIONAL WHEN NOT SHOWN) SLIGHT ADJUSTMENT MAY BE REQUIRED TO INSURE OPERABILITY AFTER INSTALLATION OF BUILDING IS COMPLETE.

13. THE AREA UNDER FOOTINGS AND FOUNDATIONS SHALL HAVE ALL VEGETATION, STUMPS, ROOTS, AND FOREIGN MATERIALS REMOVED PRIOR TO THEIR CONSTRUCTION.

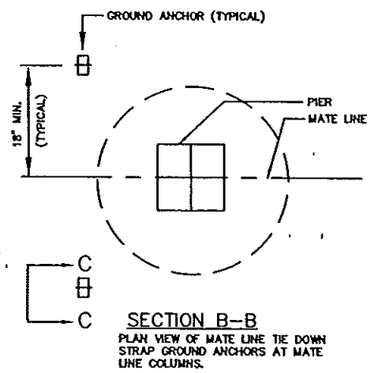
14. THE PERIMETER GRADE SHALL BE SLOPED AWAY FROM THE BUILDING TO PROVIDE POSITIVE DRAINAGE. THE GRADE OF THE GROUND UNDER THE BUILDING SHALL NOT BE LOWER THAN THE LOWEST SURROUNDING FINISHED LOT AREA GRADE IN ORDER TO PREVENT THE ACCUMULATION AND STANDING OF WATER UNDER THE BUILDING.

15. ALL STAIRS, RAMPS, DECKS AND OTHER SITE WORK NOT SHOWN ON THESE DRAWINGS ARE DESIGNED BY OTHERS AND SUBJECT TO THE APPROVAL OF THE JURISDICTION HAVING AUTHORITY.

16. TERMITE PROTECTION SHALL BE PROVIDED IN ACCORDANCE WITH THE APPLICABLE CODES WHEN REQUIRED BY SUCH CODES.

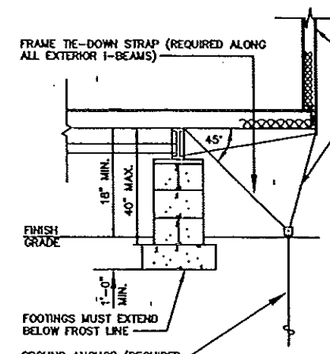
17. FOUNDATION ENCLOSURE (IF PROVIDED) IS DESIGNED BY OTHERS. ENCLOSURE MUST HAVE A MINIMUM NET VENT AREA OF VENTILATION OPENINGS OF NOT LESS THAN 1 SQUARE FOOT FOR EACH 150 SQUARE FEET OF CRAWL SPACE AREA. LOCATE OPENINGS TO PROVIDE CROSS VENTILATION OF ENTIRE CRAWL SPACE. INSTALL AN 18" X 24" MINIMUM OPENING FOR CRAWL SPACE ACCESS.

18. THE FOUNDATION DIMENSIONS SHOWN ARE NOMINAL. AN INCREASE IN MODULE WIDTH SHOULD BE EXPECTED DUE TO MODULE EXPANSION, SETTING TOLERANCES, ETC. THE FOUNDATION CONTRACTOR SHOULD CONSULT WITH THE MANUFACTURER OF THE MODULES PRIOR CONSTRUCTION OF THE FOUNDATION TO DETERMINE THE AMOUNT OF INCREASED WIDTH TO BE ADDED TO THE NOMINAL DIMENSIONS SHOWN ON THE FOUNDATION PLAN.



SECTION B-B

PLAN VIEW OF MATE LINE TIE DOWN STRAP GROUND ANCHORS AT MATE LINE COLUMNS.

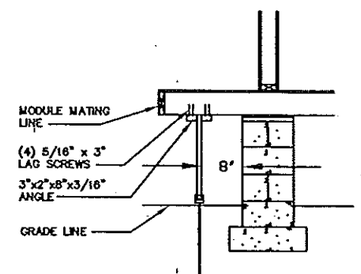


SECTION A-A

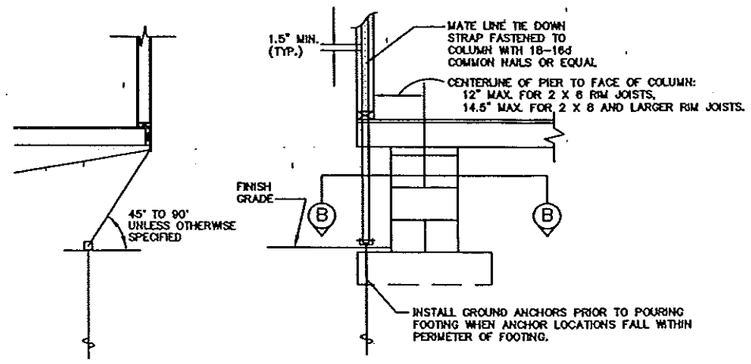
FRAME TIE-DOWN STRAP* & GROUND ANCHOR ON CENTER SPACING CHART *		
WIND SPEED	WITHIN 14' OF END WALLS **	ELSEWHERE
130 MPH	3'-4"	5'-4"
120 MPH	4'-0"	6'-6"
110 MPH	5'-0"	8'-0"
100 MPH	6'-4"	9'-8"
90 MPH	8'-0"	11'-0"

* ALL POINTS ALONG I-BEAMS SHALL BE WITHIN 1/2 OF THESE DIMENSIONS OF A STRAP/ANCHOR LOCATION.

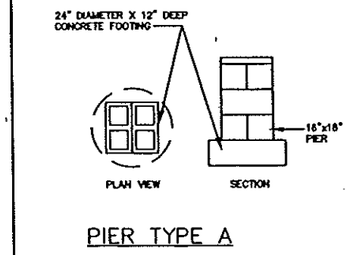
** THE FIRST STRAP/ANCHOR LOCATION FROM EACH END WALL SHALL NOT EXCEED 1/2 OF THIS DIMENSION.



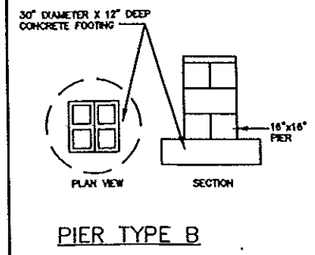
SECTION 'X'-'X'



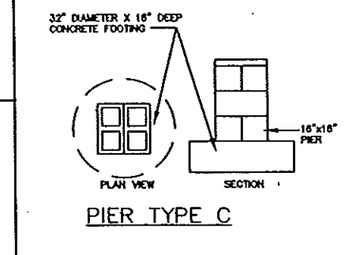
MATE LINE TIE DOWN STRAP DETAIL



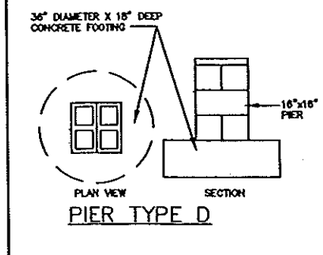
PIER TYPE A



PIER TYPE B



PIER TYPE C

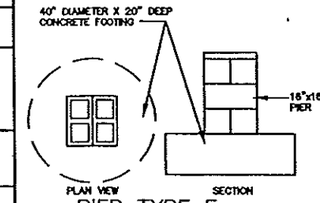


PIER TYPE D

FOUNDATION DIMENSIONS

A MODULE WIDTH	B PIER TO MODULE EDGE	C STEEL BEAM SPACING
13'-8"	34-1/4"	95-1/2"

SOIL BEARING CAPACITY (PSF)	D MAXIMUM PIER SPACING
2000	4'-10"
3000	7'-9"



PIER TYPE E

MATE LINE TIE DOWN STRAP REQUIREMENTS

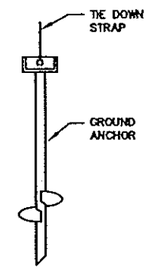
ANGLE FROM GRADE TO STRAP AS SHOWN BELOW	45°	90°
MAXIMUM TIE DOWN STRAP SPACING (EACH MODULE)	21'-5"	30'-2"

NOTE: MAXIMUM STRAP SPACING FOR ANGLES BETWEEN 45° AND 90° MAY BE INTERPOLATED.

NOTES:
1. SEE "MATE LINE TIE DOWN STRAP DETAIL" FOR CONNECTION REQUIREMENTS.
2. MATE LINE TIE DOWN STRAPS ARE REQUIRED ON EACH MODULE ALONG EACH MATE LINE.
3. A MATE LINE TIE DOWN STRAP SHALL BE LOCATED AS CLOSE AS POSSIBLE TO EACH EXTERIOR END WALL.
4. MATE LINE TIE DOWN STRAPS REQUIRED AT COLUMN LOCATIONS COUNT TOWARDS THE STRAP SPACING REQUIREMENTS SPECIFIED ABOVE.

MATE LINE PIER REQUIREMENTS

PIER NUMBER △	MINIMUM SOIL BEARING CAPACITY	PIER TYPE	NUMBER OF MATE LINE TIE DOWN STRAPS REQ'D (EA. MODULE)
1	2000 PSF	A	1
	3000 PSF	A	1
2	2000 PSF	B	1
	3000 PSF	A	1
3	2000 PSF	D	1
	3000 PSF	B	1
4	2000 PSF	E	1
	3000 PSF	D	1
5	2000 PSF	B	0
	3000 PSF	A	0
6	2000 PSF	A	0
	3000 PSF	A	0
	2000 PSF		
	3000 PSF		



SECTION C-C

APPROVED
APR 23 2007
REVIEWED BY: S. FRANCIS
HWCNC, P.C.

APR 20 2007

DESIGN SPACE, INC.
91 HARVEY VICKERS RD., DOUGLAS, GA. 31533
CLINCH COUNTY IND. PARK, HOMERVILLE, GA. 31634

SOUTHLAND MODULAR
1110 IND. PARK RD.
McRAE, GA. 31055

DATE: 03/26/2007
SCALE : -NTS-
CODES: SEE SUMMARY
LABELS: NC.

KENNETH A. GODFREY, P.E.
CONSULTING ENGINEER
12132 RUSTIC BARN TRAIL
MORGANTON, GA 30560

REVISIONS:

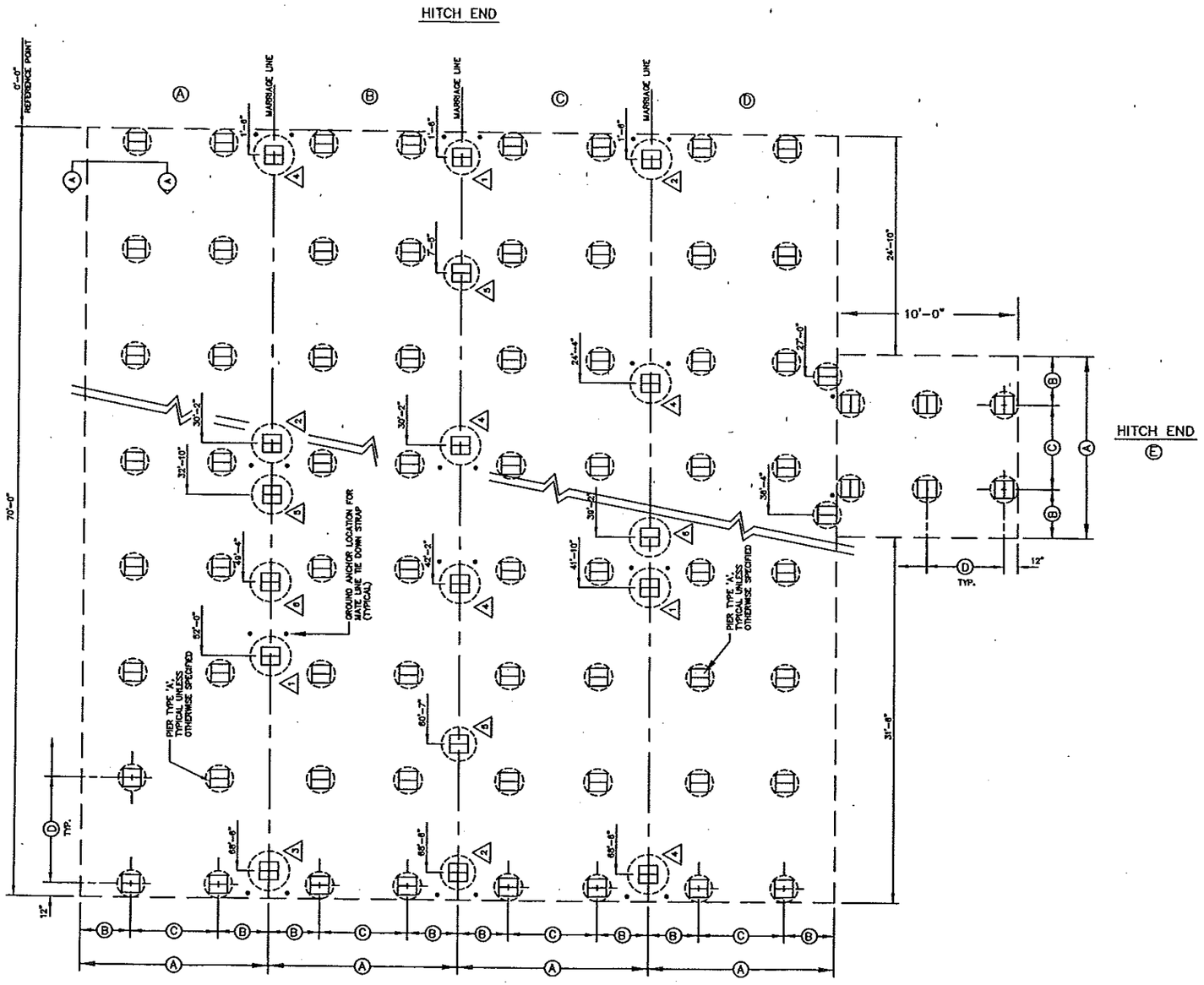
BY: KAG.

DSI 17078 A/E — ASSEMBLY (A-2)

FOUNDATION NOTES & DETAILS

KAG. NO. 0322070SI

SHEET 13 OF 15



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APR 20 2007

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DATE: 03/26/2007	KENNETH A. GODFREY, P.E. CONSULTING ENGINEER 12132 RUSTIC BARN TRAIL MORGANTON, GA 30560	
SCALE : –NTS–		
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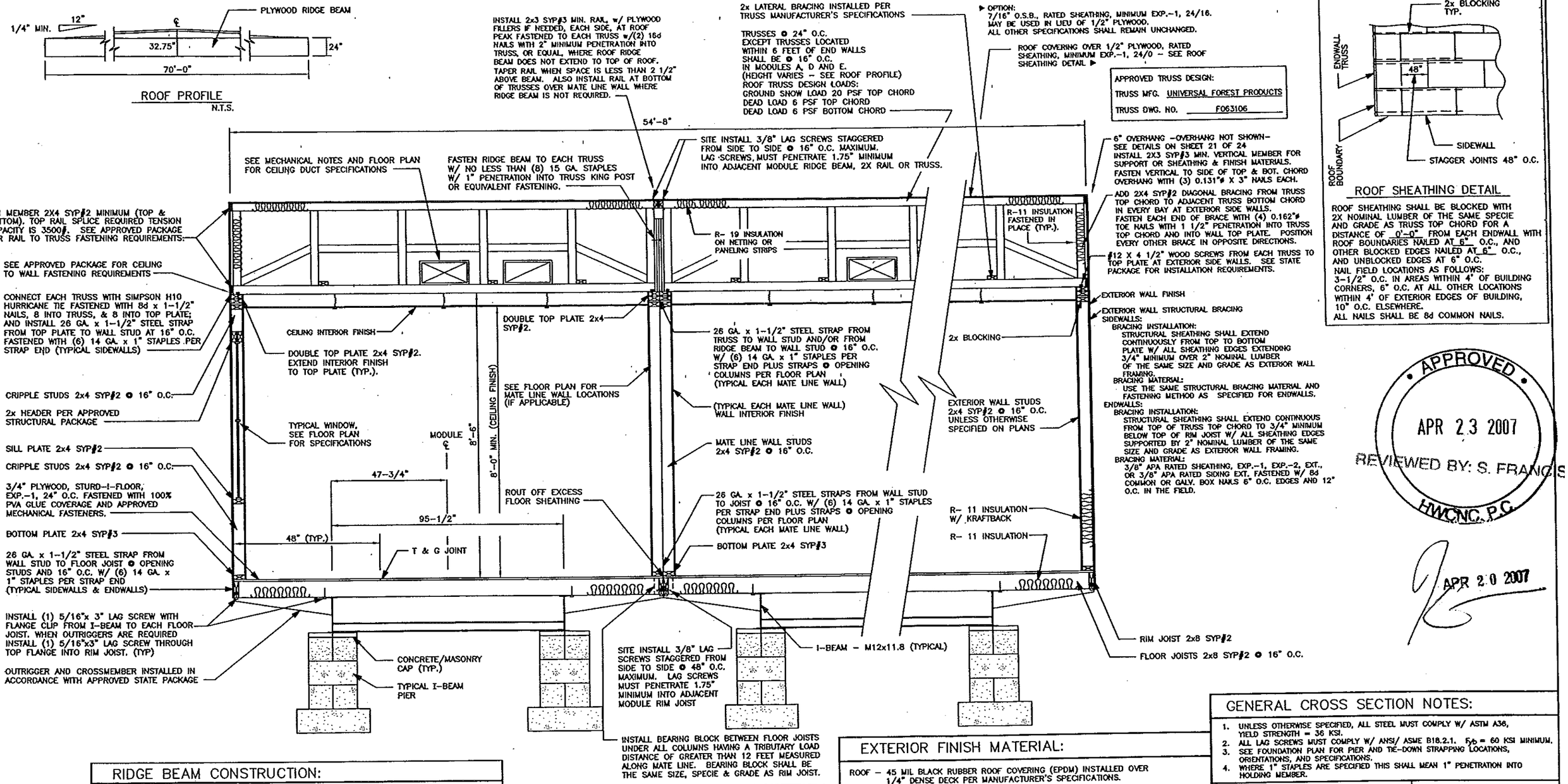
DSI 17078 A/E	ASSEMBLY (A-2)	SHEET 14 OF 15
FOUNDATION PLAN	KAG. NO. 032207DSI	



ROOF SHEATHING DETAIL

ROOF SHEATHING SHALL BE BLOCKED WITH 2X NOMINAL LUMBER OF THE SAME SPECIE AND GRADE AS TRUSS TOP CHORD FOR A DISTANCE OF 0'-0" FROM EACH ENDWALL WITH ROOF BOUNDARIES NAILED AT 6" O.C., AND OTHER BLOCKED EDGES NAILED AT 6" O.C., AND UNBLOCKED EDGES AT 6" O.C.
NAIL FIELD LOCATIONS AS FOLLOWS:
3-1/2" O.C. IN AREAS WITHIN 4' OF BUILDING CORNERS, 6" O.C. AT ALL OTHER LOCATIONS WITHIN 4' OF EXTERIOR EDGES OF BUILDING, 10" O.C. ELSEWHERE.
ALL NAILS SHALL BE 8d COMMON NAILS.

APPROVED
APR 23 2007
REVIEWED BY: S. FRANCIS
HWC,NC,P.G.
APR 20 2007

RIDGE BEAM CONSTRUCTION:

4 LAYERS 3/4"x 24" PLYWOOD, RATED SHEATHING, EXP.-1, STRUCT.-1, 5 PLY/5 LAYER, 48/24 EACH HALF CONTINUOUS ENTIRE LENGTH OF BUILDING.

NOTES:

1. PLYWOOD FACE GRAIN MUST BE PARALLEL TO THE RIDGE BEAM SPAN.
2. ALL PLYWOOD BUTT JOINTS MUST BE STAGGERED 24" MINIMUM.
3. ALL RIDGE BEAM PLYWOOD LAMINATIONS MUST BE THE SAME DEPTH, THICKNESS, AND GRADE OF PLYWOOD. NO LUMBER OR PLYWOOD FLANGES ARE PERMITTED.
4. PLYWOOD MUST BE MANUFACTURED IN ACCORDANCE W/ PS I-95.
5. PLYWOOD LAMINATIONS IN EACH HALF OF THE UNITS MUST BE GLUE NAILED TO ADJACENT LAYERS IN ACCORDANCE W/ PDS SUPPLEMENT #5, W/ AN ADHESIVE COMPLYING W/ ASTM D2559, OR CA25-4.
6. PLYWOOD MUST NOT BE TREATED W/ A FIRE RETARDANT PROCESS.
7. MOISTURE CONTENT MUST BE LESS THAN 16%.
8. BEAMS SUPPORTED BY ENDWALL COLUMNS MUST EXTEND CONTINUOUS OVER COLUMNS TO EXTERIOR FACE OF ENDWALL.
9. INSTALL (2x4) x 20" SPF#3 RIDGE BEAM BEARING STIFFENER OVER SUPPORT COLUMNS, WHEN SPECIFIED ON FLOOR PLAN; FASTEN THE FACE OF THE STIFFENER TO THE RIDGE BEAM W/ 100% GLUE COVERAGE AND (6) 16 GA. x 2-1/2" STAPLES.

INTERIOR FINISH MATERIAL:

CEILING - T-GRID CEILING INSTALLED PER MANUFACTURER'S SPECIFICATIONS. EXCEPT - CORRIDOR/FOYER TO HAVE ONE HOUR RATING. SEE ONE HOUR PENETRATION NOTES AND DETAILS ON SHEET 3 OF 15.

WALL - CORRIDOR/FOYER TO HAVE ONE HOUR RATING. SEE ONE HOUR HOUR PENETRATION NOTES AND DETAILS ON SHEET 3 OF 15. ELSEWHERE - 1/2 INCH MINIMUM GYPSUM BOARD (VINYL COVERED) AND FIBERGLASS REINFORCED PANELING OVER 1/2 INCH MINIMUM GYPSUM BOARD IN ALL RESTROOM(S).

FLOOR - BLOCK TILE OR LINOLEUM IN BATHROOM AND OTHER WET AREAS. CARPET, BLOCK TILE, OR LINOLEUM INSTALLED IN ALL OTHER AREAS. FLOOR COVERING MAY BE SITE INSTALLED BY OTHERS AND SUBJECT TO THE LOCAL JURISDICTION HAVING AUTHORITY.

EXTERIOR FINISH MATERIAL:

ROOF - 45 MIL BLACK RUBBER ROOF COVERING (EPDM) INSTALLED OVER 1/4" DENSE DECK PER MANUFACTURER'S SPECIFICATIONS.

WALL - 5/16" HARDIPANEL*
* MAY BE USED AS A BRACING MATERIAL ON EXTERIOR WALLS. INSTALL SIDING PER INSTALLATION SPECIFICATIONS GIVEN FOR 3/8 INCH APA RATED SIDING EXTERIOR AND FASTEN WITH 6d x 2" NAILS, 4" O.C. EDGES & 4" O.C. FIELD.

GENERAL FINISH NOTES:
1. ALL ROOFING AND SIDING MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH THE PRODUCTS MANUFACTURER'S INSTALLATION INSTRUCTIONS.
2. ROOFING AND SIDING MATERIALS AND THEIR FASTENINGS SHALL BE DESIGNED AND INSTALLED SO AS TO RESIST THE COMPONENT WIND LOAD SHOWN ON THE COVER SHEET.
3. ALL ROOF COVERINGS SHALL MEET CLASS C OR BETTER REQUIREMENTS.
4. WALL FINISH SHALL BE INSTALLED OVER APPROVED MOISTURE PROTECTION AND BRACING MATERIAL.
5. MOISTURE PROTECTION BEHIND WALL COVERING SHALL BE AS REQUIRED BY EXTERIOR WALL FINISH MANUFACTURER'S SPECIFICATIONS, BUT NOT LESS THAN ONE LAYER OF NO. 15 ASPHALT FELT, COMPLYING WITH ASTM D226 FOR TYPE I FELT, ATTACHED IN SUCH A MANNER AS TO PROVIDE A CONTINUOUS WATER-RESISTIVE BARRIER BEHIND THE EXTERIOR WALL FINISH.

GENERAL CROSS SECTION NOTES:

1. UNLESS OTHERWISE SPECIFIED, ALL STEEL MUST COMPLY W/ ASTM A36, YIELD STRENGTH = 36 KSI.
2. ALL LAG SCREWS MUST COMPLY W/ ANSI/ ASME B18.2.1. F_{yb} = 60 KSI MINIMUM.
3. SEE FOUNDATION PLAN FOR PIER AND TIE-DOWN STRAPPING LOCATIONS, ORIENTATIONS, AND SPECIFICATIONS.
4. WHERE 1" STAPLES ARE SPECIFIED THIS SHALL MEAN 1" PENETRATION INTO HOLDING MEMBER.

DESIGN SPACE, INC. 91 HARVEY VICKERS RD., DOUGLAS, GA. 31533 CLINCH COUNTY IND. PARK, HOMERVILLE, GA. 31634	SOUTHLAND MODULAR 1110 IND. PARK RD. McRAE, GA. 31055
DATE: 03/26/2007	KENNETH A. GODFREY, P.E. CONSULTING ENGINEER 12132 RUSTIC BARN TRAIL MORGANTON, GA 30560
SCALE : -NTS-	
CODES: SEE SUMMARY	REVISIONS: BY: KAG.
LABELS: NC.	
DSI 17078 A/E	ASSEMBLY (A-2)
CROSS SECTION	KAG. NO. 032207DSI
	SHEET 15 OF 15

05422SSC 3/01

Reference: ACCA Manual N Fourth Edition

Variables:

Building destination:	Raleigh, NC	Occupant content:	OC := 59
Outside summer DB (degree F.):	OS := 94	Outside air CFM from HVAC:	OA := 1090
Inside summer DB (degree F.):	IS := 78	Heat recovery reduction:	HR := 1.0
Outside winter DB (degree F.):	OW := 18	No. of exterior doors:	EX := 3
Inside winter DB (degree F.):	IW := 68	Winter CFM/door:	WCFM := 0
Design grains at 50% RH:	DG := 40	Summer CFM/door:	SCFM := 0
Daily range (Degree F.):	DR := 20	Wall height in feet:	WH := 10.5
Summer attic deg. F. increase:	AT := 0	Incandescent lighting (watts):	IL := 60
		Fluorescent lighting (watts): (Do not include ballast load)	FL := 1440

	Glass area (SF):	Gross wall area (SF):	U-values:	
North	N := 17.3	NW := 679		
East	E := 17.3	EW := 735		
South	S := 8.6	SW := 679	UG := 1.04	Glass
West	W := 17.3	WW := 735	UW := 0.08	Wall

	Gross areas (SF):	U-values:		
			Glass shading factor:	SF := 0.75
Wood/metal doors:	WD := 0	WU := 0.6	Equipment load:	EL := 12.5
Glass/french doors:	GD := 84	GU := 1.10		
Roof:	R := 3963	RU := 0.05		
Floor:	F := 3963	FU := 0.08		

Heat Gains (Cooling Loads):

Sensible heat gain:

A. Solar radiation through glass:

North: SRN := N·30·SF East: SRE := E·44·SF South: SRS := S·56·SF West: SRW := W·158·SF

Total: SR := SRN + SRE + SRS + SRW SR = 3371

B. Transmission gains:

Glass: GA := N + E + S + W TG := GA·UG·(OS – IS) TG = 1007

Doors: TWG := WD·WU·(OS – IS) TWG = 0 TGD := GD·GU·(OS – IS) TGD = 1478

Walls: Temperature correction: TC := OS – IS – 20

Daily range correction: DRC := 0.5·(20 – DR) ETD := TC + DRC ETD = –4

North: TWN := (NW – N)·UW·(ETD + 15)

East: TWE := (EW – E)·UW·(ETD + 36)

South: TWS := (SW – S)·UW·(ETD + 23)

West: TWW := (WW – W)·UW·(ETD + 17)

Total: TW := TWN + TWE + TWS + TWW TW = 4185

Roof:	TR := R·RU·[(OS – IS) + AT]	TR = 3170
Floor:	FR := F·FU·(OS – IS)	FR = 5073
Total transmission gains:	T := TG + TWG + TGD + TW + TR + FR	T = 14913
C. Occupants:	SO := OC·230	SO = 13570
D. Lights:	L := (IL·3.4) + (FL·4.1)	L = 6108
E. Equipment:	EQ := EL·F	EQ = 49538
F. Infiltration:	ICFM := $WH \cdot F \cdot \frac{0.4}{60}$ SI := (ICFM + SCFM·EX)·(OS – IS)·1.1	SI = 4882
G. Ducts:	SD := (SR + T + SO + L + EQ + SI)·0.05	SD = 4619
H. Ventilation:	SV := OA·HR·(OS – IS)·1.1	SV = 19184
Total sensible heat gain:	SHG := SR + T + SO + L + EQ + SI + SD + SV	SHG = 116186
Latent heat gain:		
A. Occupants:	LO := OC·190	LO = 11210
B. Ventilation:	LV := OA·HR·DG·0.68	LV = 29648
C. Infiltration:	LI := (ICFM + SCFM·EX)·DG·0.68	LI = 7546
Total latent heat gain:	LHG := LO + LV + LI	LHG = 48404
Total heat gain:	HG := SHG + LHG HG = 164589 BTUH	

Heat Loss (Heating Loads):

A. Transmission loss:

Glass:	LTG := GA·UG·(IW – OW)	LTG = 3146
Doors:	LTWD := WD·WU·(IW – OW)	LTWD = 0
	LTGD := GD·GU·(IW – OW)	LTGD = 4620
Walls:	LTW := (NW + EW + SW + WW – GA)·UW·(IW – OW)	LTW = 11070

Roof:	LR := R·RU·(IW – OW)	LR = 9908
Floor:	LF := F·FU·(IW – OW)	LF = 15852
Total transmission loss:	LT := LTG + LTWD + LTGD + LTW + LR + LF	LT = 44596
B. Infiltration:	ICFM := $WH \cdot F \cdot \frac{0.6}{60}$ LI := (ICFM + WCFM·EX)·(IW – OW)·1.1	LI = 22886
C. Ducts:	LD := (LT + LI)·0.05	LD = 3374
D. Ventilation:	LV := OA·HR·(IW – OW)·1.1	LV = 59950
Total heat loss:	HL := LT + LI + LD + LV HL = 130806 BTUH	

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MANUFACTURER: DESIGN SPACE, INC.
SERIAL NUMBER: DSI17078 A/E
KAG NUMBER: 032207DSI

2006 APPENDIX B
BUILDING CODE SUMMARY
FOR ALL COMMERCIAL PROJECTS
(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)
(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project: _____
Address: _____ Zip Code _____
Proposed Use: ASSEMBLY (A-2)
Owner/Authorized Agent: _____ Phone # (____) ____-____ E-Mail _____
Owned By: ☐ City/County ☐ Private ☐ State
Code Enforcement Jurisdiction: ☐ City_____ ☐ County_____ ☐ State

LEAD DESIGN PROFESSIONAL: KENNETH A. GODFREY – FACTORY BUILT PORTION OF PROJECT

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural				(___)___-____	
Civil				(___)___-____	
Electrical				(___)___-____	
Fire Alarm				(___)___-____	
Plumbing				(___)___-____	
Mechanical				(___)___-____	
Sprinkler-Standpipe				(___)___-____	
Structural	KENNETH A. GODFREY		18282	(706)374-1741	
Retaining Walls >5' High				(___)___-____	
Other				(___)___-____	

2006 EDITION OF NC CODE FOR: ☒ New Construction ☐ Addition ☐ Upfit
EXISTING: ☐ Reconstruction ☐ Alteration ☐ Repair
CONSTRUCTED _____ **ORIGINAL USE** _____ **RENOVATED** _____ **CURRENT USE** _____

BUILDING DATA
Construction Type: ☐ I-A ☐ I-B ☐ II-A ☐ II-B ☐ III-A ☐ III-B ☐ IV ☐ V-A ☒ V-B
Mixed construction: ☒ No ☐ Yes Types _____
Sprinklers: ☒ No ☐ Partial ☐ Yes ☐ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D
Standpipes: ☒ No ☐ Yes Class ☐ I ☐ II ☐ III ☐ Wet ☐ Dry
Fire District: ☒ No ☐ Yes **Flood Hazard Area:** ☐ No ☐ Yes
Building Height: Feet 14 Number of Stories 1
Mezzanine: ☒ No ☐ Yes
Gross Building Area:

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
6th Floor			
5th Floor			
4th Floor			
3rd Floor			
2nd Floor			
Mezzanine			
1st Floor		3963	3963

ALLOWABLE AREA

Primary Occupancy: Assembly ☐ A-1 ☒ A-2 ☐ A-3 ☐ A-4 ☐ A-5
☐ Business ☐ Educational Factory ☐ F-1 Moderate ☐ F-2 Low
Hazardous ☐ H-1 Detonate ☐ H-2 Deflagrate ☐ H-3 Combust ☐ H-4 Health ☐ H-5 HPM
Institutional ☐ I-1 ☐ I-2 ☐ I-3 ☐ I-4
I-3 Condition ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
☐ Mercantile Residential ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4
Storage ☐ S-1 Moderate ☐ S-2 Low ☐ High-piled
☐ Utility and Miscellaneous ☐ Parking Garage ☐ Open ☐ Enclosed ☐ Repair Garage

Secondary Occupancy: _____

Special Uses: ☐ 402 ☐ 403 ☐ 404 ☐ 405 ☐ 406 ☐ 407 ☐ 408 ☐ 409 ☐ 410 ☐ 411 ☐ 412 ☐ 413 ☐ 414 ☐ 415 ☐ 416 ☐ 417 ☐ 418 ☐ 419 ☐ 420 ☐ 421

Special Provisions: ☐ 508.2 ☐ 508.3 ☐ 508.4 ☐ 508.5 ☐ 508.6 ☐ 508.7 ☐ 508.8

Mixed Occupancy: ☐ No ☒ Yes Separation: 0 Hr. Exception: _____

☐ Incidental Use Separation (302.1.1)
This separation is not exempt as a Non-Separated Use (see exceptions).

☒ Non-Separated Use (302.3.1)
The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.

☐ Separated Use (302.3.2) - See below for area calculations
For each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

$$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} \leq 1$$

_____ + _____ + ... = _____ ≤ 1.00

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 503[5] AREA	(C) AREA FOR FRONTAGE INCREASE[1]	(D) AREA FOR SPRINKLER INCREASE[2]	(E) ALLOWABLE AREA OR UNLIMITED[3]	(F) MAXIMUM BUILDING AREA[4]
1	A-2	3963	6000			6000	6000

[1] Frontage area increases from Section 506.2 are computed thus:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = _____ (F)
b. Total Building Perimeter = _____ (P)
c. Ratio (F/P) = _____ (F/P)
d. W = Minimum width of public way = _____ (W)
e. Percent of frontage increase $I_f = 100\,[F/P - 0.25] \times W/30$ = _____ (%)

[2] The sprinkler increase per Section 506.3 is as follows:
a. Multi-story building $I_s = 200$ percent
b. Single story building $I_s = 300$ percent

[3] Unlimited area applicable under conditions of Sections Group B, F, M, S, A-4 (507); Group A motion picture (507.9); Malls (402.6); and H-2 aircraft paint hangers (507.7).

[4] Maximum Building Area = total number of stories in the building x E (506.4).

[5] The maximum area of parking garages must comply with 406.3.5. The maximum area of air traffic control towers must comply with 412.1.2.

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ALLOWABLE HEIGHT

	ALLOWABLE (TABLE 503)	INCREASE FOR SPRINKLERS	SHOWN ON PLANS	CODE REFERENCE
Type of Construction	Type V-B		Type V-B	
Building Height in Feet	Feet 40	Feet = H + 20' =	14	
Building Height in Stories	Stories 1	Stories + 1 =	Stories 1	

FIRE PROTECTION REQUIREMENTS

Life Safety Plan Sheet #, if Provided _____ ← HORIZONTAL SEPARATION > 10 FEET ASSUMED

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING REQ'D	RATING PROVIDED (w/_____[a] REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
Structural Frame, including columns, girders, trusses		0	0				
Bearing Walls		0	0				
Exterior							
North							
East							
West							
South							
Interior							
Nonbearing Walls and Partitions Exterior walls		0	0				
North							
East							
West							
South							
Interior walls and partitions							
Floor Construction Including supporting beams and joists		0	0				
Roof Construction Including supporting beams and joists		0	0				
Shaft Enclosures - Exit	N/A						
Shaft Enclosures - Other	N/A						
Corridor Separation		1	1				
Occupancy Separation		0	0				
Party/Fire Wall Separation	N/A						
Smoke Barrier Separation	N/A						
Tenant Separation	N/A						
Incidental Use Separation		0	0				

[a] Indicate section number permitting reduction

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting:	☐ No	☒ Yes
Exit Signs:	☐ No	☒ Yes
Fire Alarm:	☒ No	☐ Yes
Smoke Detection Systems:	☒ No	☐ Yes
Panic Hardware:	☒ No	☐ Yes

EXIT REQUIREMENTS

NUMBER AND ARRANGEMENT OF EXITS

FLOOR, ROOM OR SPACE DESIGNATION	MINIMUM[2] NUMBER OF EXITS REQUIRED	MINIMUM[2] NUMBER OF EXITS SHOWN ON PLANS	TRAVEL DISTANCE ALLOWABLE TRAVEL DISTANCE (TABLE 1015.1)	TRAVEL DISTANCE ACTUAL TRAVEL DISTANCE SHOWN ON PLANS	ARRANGEMENT MEANS OF EGRESS[1,3] (SECTION 1014.2) REQUIRED DISTANCE BETWEEN EXIT DOORS	ARRANGEMENT MEANS OF EGRESS[1,3] (SECTION 1014.2) ACTUAL DISTANCE SHOWN ON PLANS
BREAKROOM	2	2	200'	30'	22'	35'
OVERALL	2	3	200'	60'	45'	56'

[1] Corridor dead ends (Section 1016.3)
[2] Single exits (Table 1018.2)
[3] Common Path of Travel (Section 1013.3)

EXIT WIDTH

USE GROUP OR SPACE DESCRIPTION	(a) AREA[1] sq. ft.	(b) AREA[1] PER OCCUPANT (TABLE 1003.2.2.2)	CALCULATED OCCUPANT LOAD	(c) EGRESS WIDTH PER OCCUPANT (TABLE 1005.1) STAIR	(c) EGRESS WIDTH PER OCCUPANT (TABLE 1005.1) LEVEL	EXIT WIDTH (in)[2,3,4,5,6] REQUIRED WIDTH (SECTION 1005.1) (a÷b) x c STAIR	EXIT WIDTH (in)[2,3,4,5,6] REQUIRED WIDTH (SECTION 1005.1) (a÷b) x c LEVEL	EXIT WIDTH (in)[2,3,4,5,6] ACTUAL WIDTH SHOWN ON PLANS STAIR	EXIT WIDTH (in)[2,3,4,5,6] ACTUAL WIDTH SHOWN ON PLANS LEVEL
BREAK	889	15	60						
TRAINING	525	20	26						
OFFICE	1030	100	11						
TOTAL			97	N/A	0.2	N/A	20"	N/A	34"x3

[1] See Table 1004.1.2 to determine whether net or gross area is applicable. See definition "Area, Gross" and "Area, Net" (Section 1002)
[2] Minimum stairway width (Section 1005.1); min. corridor width (Section 1016.2); min. door width (Section 1018.1)
[3] Minimum width of exit passageway (Section 1020.2)
[4] See Section 1004.5 for converging exits.
[5] The loss of one means of egress shall not reduce the available capacity to less than 50 percent of the total required (Section 1005.1)
[6] Assembly occupancies (Section 1024)

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STRUCTURAL DESIGN

DESIGN LOADS:

Importance Factors: Wind (I_W) 1.0; Snow (I_S) 1.0; Seismic (I_E) 1.0

Live Loads: Roof 20 psf; Mezzanine N/A psf; Floor 100 psf

Snow Load: 20 psf

Wind Load: Basic Wind Speed 130 mph (ASCE-7-02); Exposure Category C; Wind Base Shears (for MWFRS) Vx = 20.5K Vy = 19.0K

SEISMIC DESIGN CATEGORY A
Compliance with Section 1616.4 only? ☐ Yes ☐ No

SEISMIC DESIGN CATEGORY ☐ B ☒ C ☐ D

Provide the following Seismic Design Parameters:
Seismic Use Group I
Spectral Response Acceleration S_S 73 %g S_1 28 %g
Site Classification D ☐ Field Test ☐ Presumptive ☐ Historical Data
Basic structural system (check one)
X Bearing Wall ____ Dual w/Special Moment Frame
____ Building Frame ____ Dual w/Intermediate R/C or Special Steel
____ Moment Frame ____ Inverted Pendulum
Seismic base shear V_X = 9.0K V_Y = 9.0K
Analysis Procedure X Simplified ____ Equivalent Lateral Force ____ Modal
Architectural, Mechanical, Components anchored? X

LATERAL DESIGN CONTROL: Earthquake _____ Wind X

SOIL BEARING CAPACITIES:
Field Test (provide copy of test report) _____ psf
Presumptive Bearing capacity 2000 psf
Pile size, type, and capacity _____

PLUMBING FIXTURE REQUIREMENTS

USE		WATERCLOSETS		URINALS	LAVATORIES		SHOWERS/ TUBS	DRINKING FOUNTAINS	
		MALE	FEMALE		MALE	FEMALE		REGULAR	ACCESSIBLE
	EXISTING								
	NEW	2	5	3	3	3	0	1	1
	REQUIRED	2	2	1	2	2	0	1	1

ACCESSIBLE PARKING

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED		TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH 8' ACCESS AISLE	

DESIGNED BY OTHERS

SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DFS, ICC, etc., describe below)

DEPARTMENT OF INSURANCE - MODULAR CONSTRUCTION

ENERGY SUMMARY

ENERGY REQUIREMENTS:
The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If energy cost budget method, state the annual energy cost budget vs allowable annual energy cost budget.

THERMAL ENVELOPE

Method of Compliance:
☐ Prescriptive ☒ Performance ☐ Energy Cost Budget

Roof/ceiling Assembly (each assembly)
Description of assembly
U-Value of total assembly
R-Value of insulation
Skylights in each assembly
U-Value of skylight
total square footage of skylights in each assembly

Exterior Walls (each assembly)
Description of assembly
U-Value of total assembly
R-Value of insulation
Openings (windows or doors with glazing)
U-Value of assembly
shading coefficient
projection factor
low e required, if applicable
Door R-Values

Walls adjacent to unconditioned space (each assembly)
Description of assembly
U-Value of total assembly
R-Value of insulation
Openings (windows or doors with glazing)
U-Value of assembly
Low e required, if applicable
Door R-Values

Walls below grade (each assembly)
Description of assembly
U-Value of total assembly

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APPENDIX B

Floors over unconditioned space (each assembly)

Description of assembly
U-Value of total assembly
R-Value of insulation

Floors slab on grade

Description of assembly
U-Value of total assembly
R-Value of insulation
Horizontal/vertical requirement
slab heated

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

Method of Compliance:

☐ Prescriptive ☒ Performance ☐ Energy Cost Budget

Lighting schedule

lamp type required in fixture
number of lamps in fixture
ballast type used in the fixture
number of ballasts in fixture
total wattage per fixture
total interior wattage specified vs allowed
total exterior wattage specified vs allowed

Equipment schedules with motors (not used for mechanical systems)

motor horsepower
number of phases
minimum efficiency
motor type
# of poles

MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

Method of Compliance

☒ Prescriptive ☐ Energy Cost Budget

Climate Zone _____

Thermal Zone

winter dry bulb
summer dry bulb

Interior design conditions

winter dry bulb

Building heating load

Building cooling load

Mechanical Spacing Conditioning System

Unitary
- description of unit
- heating efficiency
- cooling efficiency
- heat output of unit
- cooling output of unit

Boiler
- total boiler output. If oversized, state reason.

Chiller
- total chiller capacity. If oversized, state reason.

List equipment efficiencies

Equipment schedules with motors (mechanical systems)

motor horsepower
number of phases
minimum efficiency
motor type
# of poles

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