

MWPS-71002

3-Bedroom Townhouse

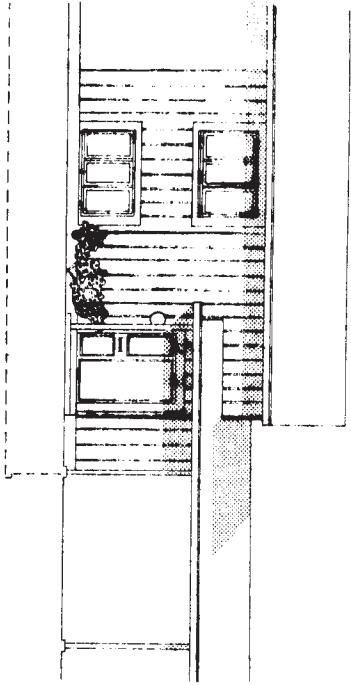
CAUTION!

Additional professional services will be required to tailor this plan to your situation, including but not limited to: assurance of compliance with codes and regulations; review of specifications for materials and equipment; supervision of site selection, bid letting and construction; and provision for utilities, waste management, roads or other access. **Furthermore, any deviation from the given specifications may result in structural failure, property damage, and personal injury including loss of life.**

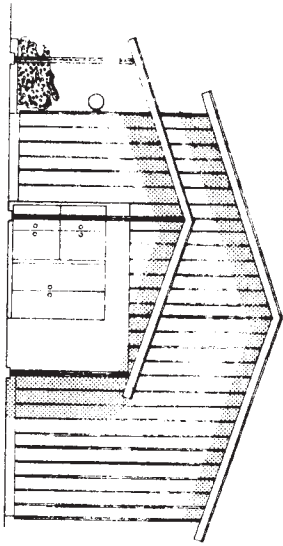
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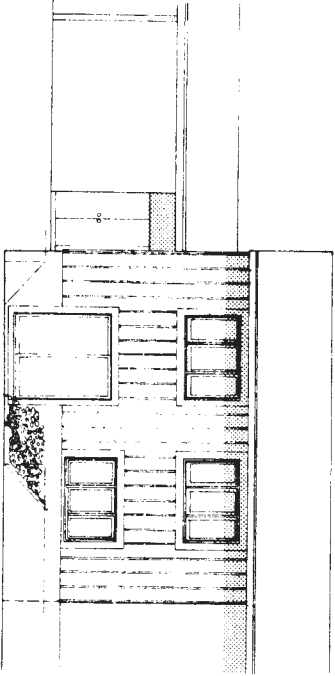
MIDWEST PLAN SERVICE
Cooperative Extension Work in Agriculture and Home Economics and Agricultural Experiment Stations of North Central Region - USDA Cooperating
3-Bedroom Townhouse
Title Page
MIDWEST PLAN NO. 71002



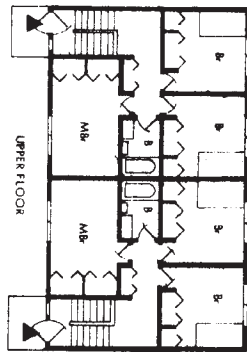
FRONT ELEVATION



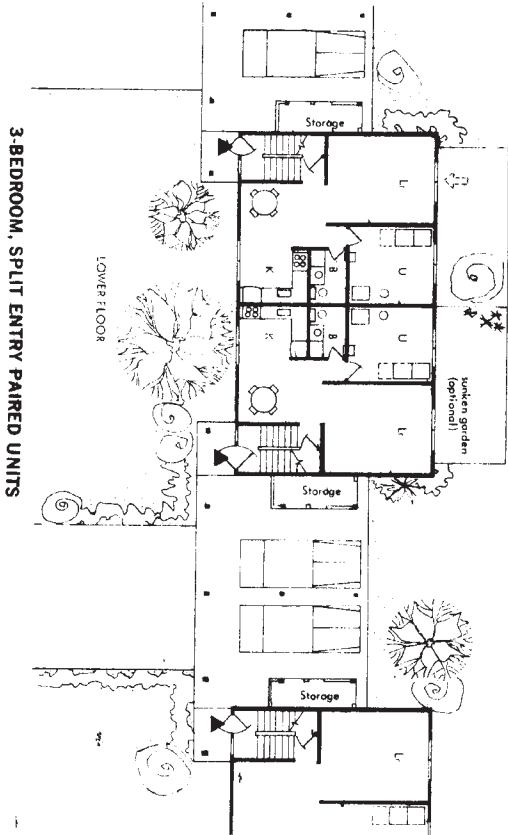
SIDE ELEVATION
(Same Both Sides)



REAR ELEVATION



UPPER FLOOR



3-BEDROOM, SPLIT ENTRY PAIRED UNITS

LOWER FLOOR

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3-BEDROOM TOWNHOUSE

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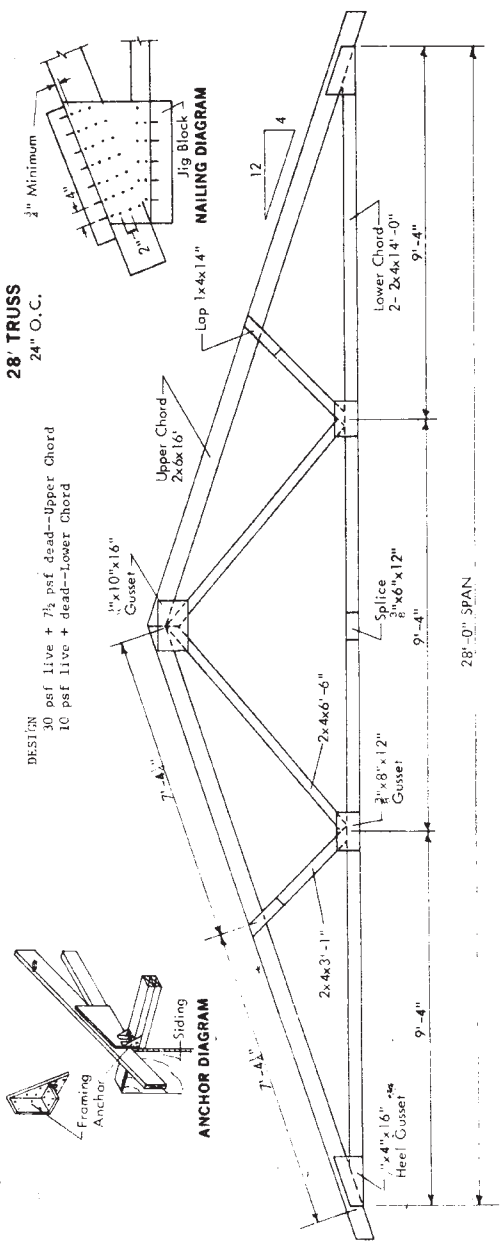
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NOTES:
 Use #2 Douglas fir-larch or equivalent, milled and used at 15% moisture content.
 Use exterior-type, CC Grade, Douglas Fir or Southern Pine Plywood. Interior type in either sanded or sheathing grades should not be used.

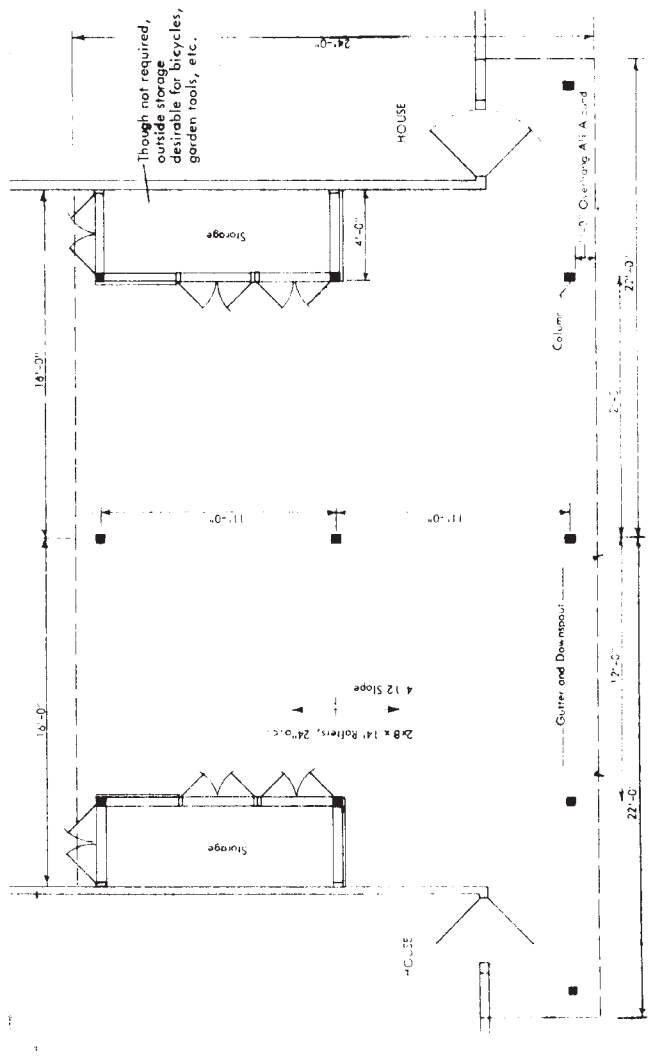
Glue
 Casein (MNH-125A, type 11, mold resistant) is not waterproof, but is highly water resistant. Use it for trusses that will stay dry throughout their life. Resorcinol resin is waterproof. Use it for trusses with any joint exposed to unusual moisture conditions. Follow the manufacturer's specs for mixing, pot life (how long the glue stays good after mixing), temperature, etc.

Remove all dirt, oil, and sand from the lumber and plywood. Protect the glued joints from moisture for one week after fabrication. Temperatures below 70° delay curing. Trusses can be erected in 24 hours at 70°, but need at least a week at 40°.

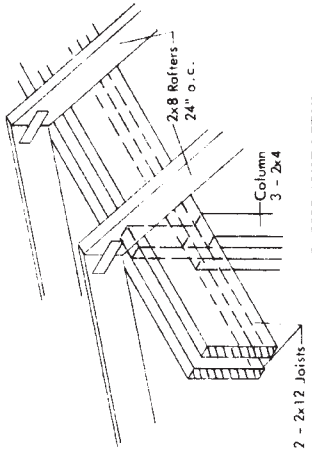
Gussets and Laps
 Apply a gusset to each side of each joint. Nails apply pressure to the joint until the glue sets. Use 6d or 7d galvanized or cement coated box nails. Use enough nails -- see diagram. If machine nailing is used, hit each nail or staple at least once with a hammer.
 Anchor trusses to plate with at least one framing anchor at each end of each truss.



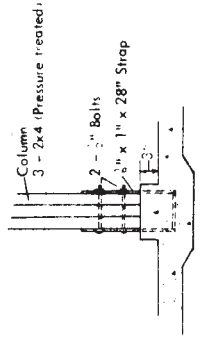
CARPOT DETAILS



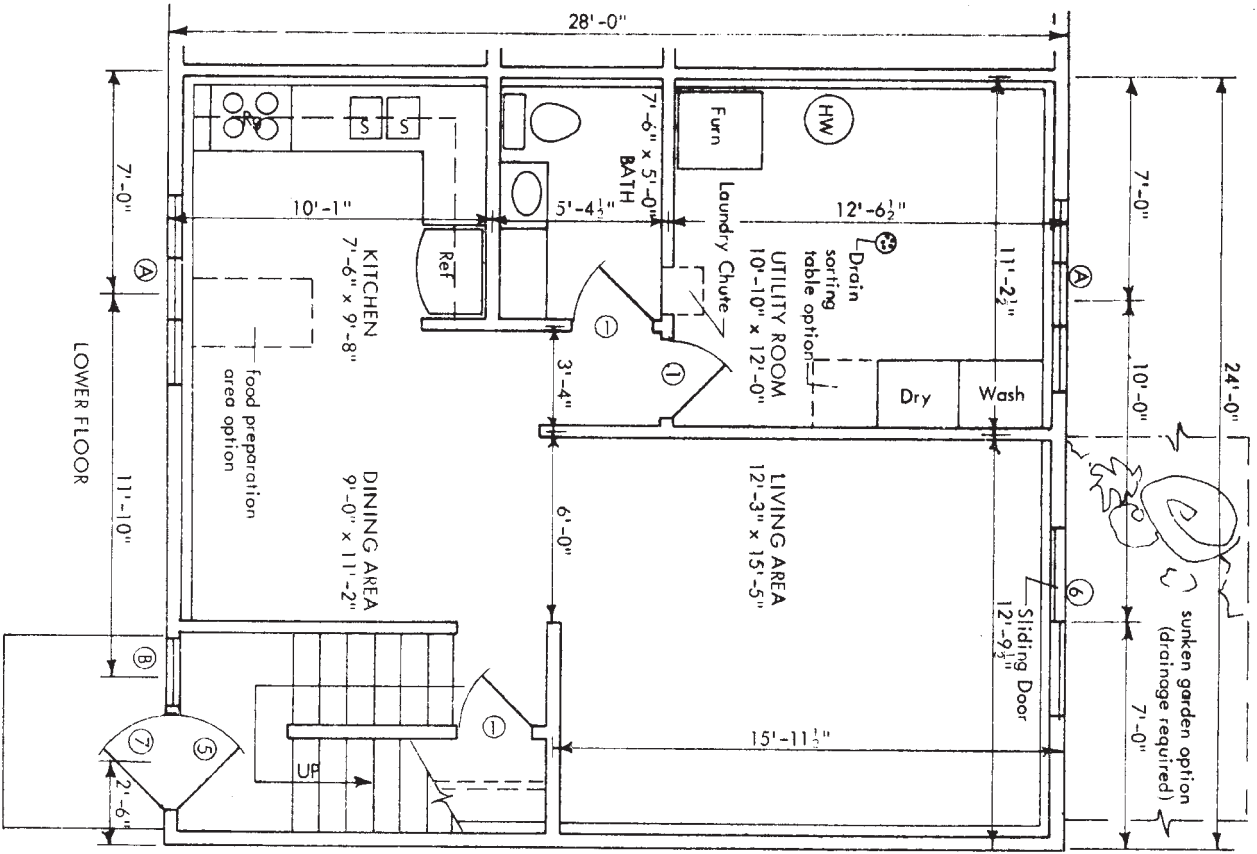
FLOOR PLAN



RAFTER-JOIST DETAIL

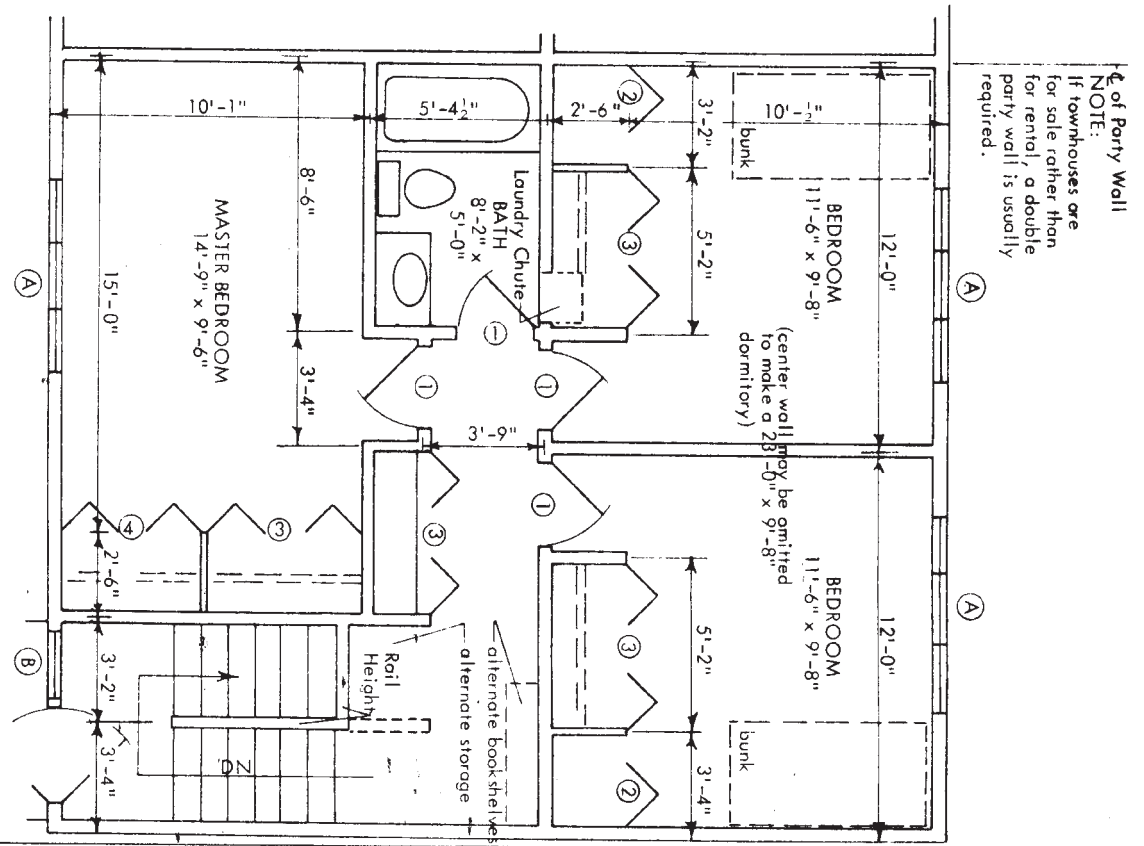


COLUMN FOOTING DETAIL



LOWER FLOOR

FLOOR PLAN
3-BEDROOM, SPLIT ENTRY
Scale: 1/4" = 1'-0"

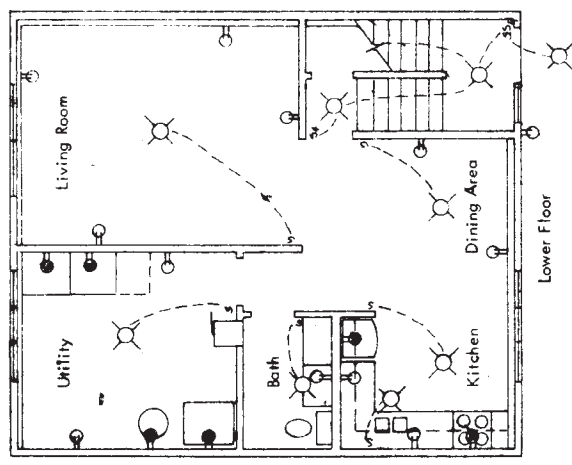
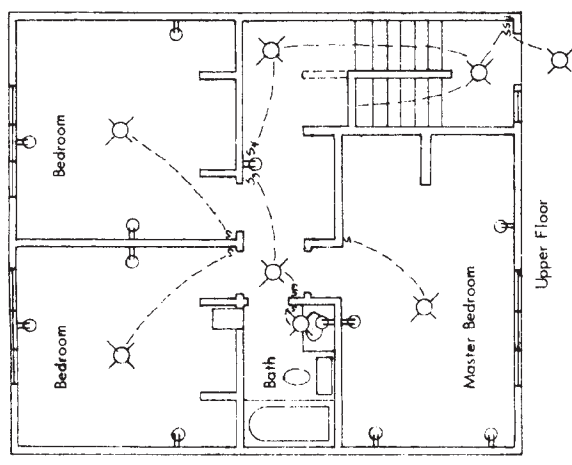


UPPER FLOOR

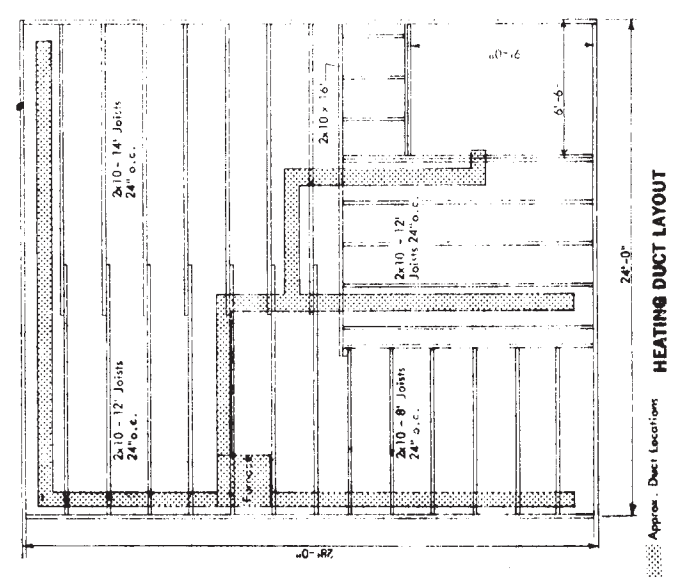
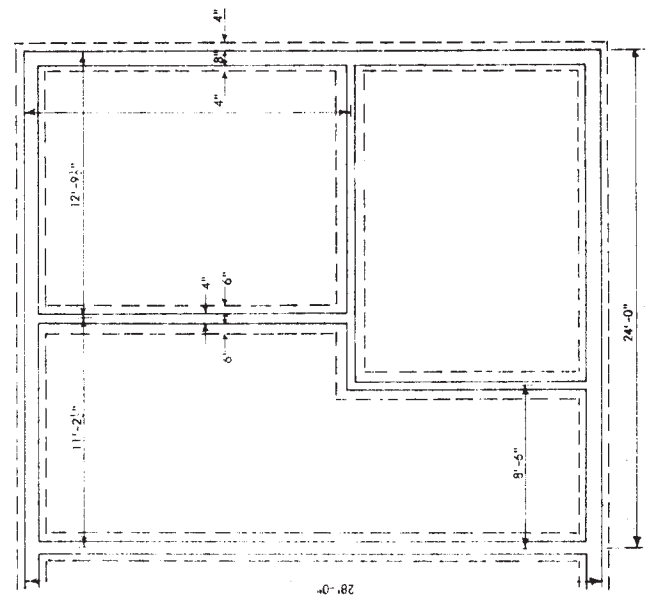
NOTE: If townhouses are for sale rather than for rental, a double party wall is usually required.

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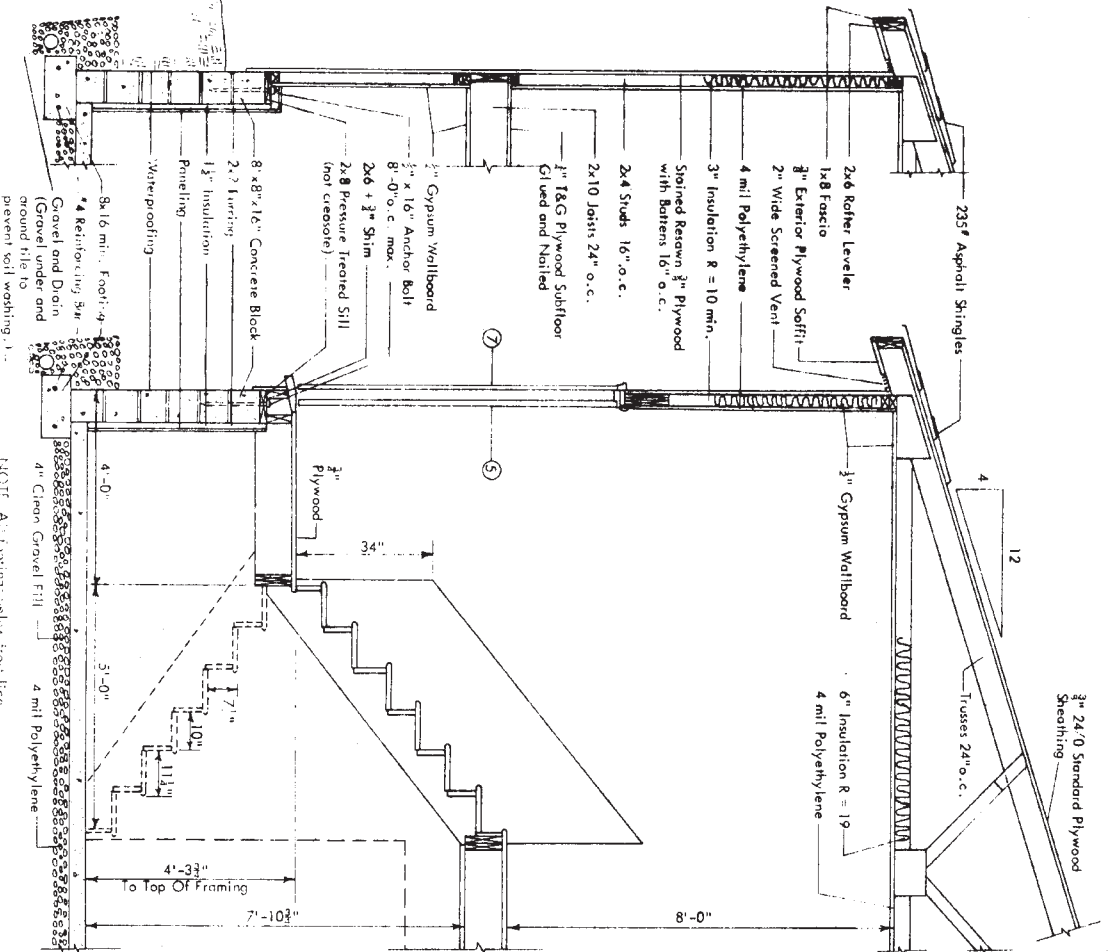
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MIDWEST PLAN NO. 71002



ELECTRICAL LAYOUT



Approx. Duct Locations



WALL SECTION

SECTION THROUGH STAIRS

NOTE: All framing to be fast fixed.

DOOR SCHEDULE					
MARK	SIZE		REMARKS	REQUIRED	
	WIDTH	HEIGHT			THICK
1	2'-6"	6'-8"	1 3/4"	Hollow Interior	7
2	3'-0"	6'-8"	1 3/4"	Bifold*	2
3	5'-0"	6'-8"	1 3/4"	Bifold*	4
4	4'-6"	6'-8"	1 3/4"	Bifold*	1
5	3'-0"	6'-8"	1 3/4"	Exterior	1
6	6'-0"	6'-8"	-	Sliding - Tempered, Insulated Glass	1
7	3'-0"	6'-8"	-	Combination Storm-Screen Tempered Glass	1

* Bifold doors may be more expensive than by-pass sliding doors, but are much more convenient. Full-height (8'-0") doors require less framing and expose overhead shelves.

WINDOW SCHEDULE					
MARK	TYPE	GLASS SIZE		DESCRIPTION	NUMBER REQUIRED
		WIDTH	HEIGHT		
A	Sliding	6'-0"	3'-6"	(not cement because of cost)	5
B	Fixed	2'-0"	6'-8"	Double Glazed	1

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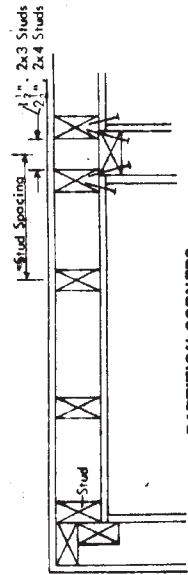
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3 - BEDROOM TOWNHOUSE

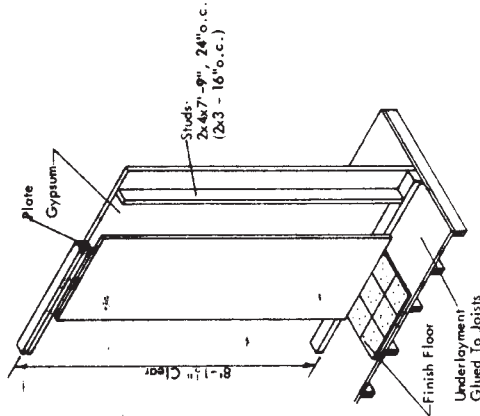
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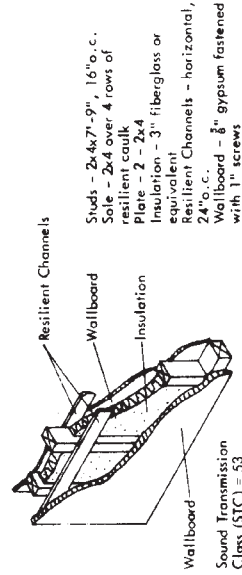
PARTITION CORNERS



Studs, Sole, or Plates: Stud grade DF, SYP, or equiv.
 Studs: Downstairs - 2x4 @ 7'-9" (24" o.c.)
 Bearing Walls 16" o.c.
 Non-bearing Walls 24" o.c.

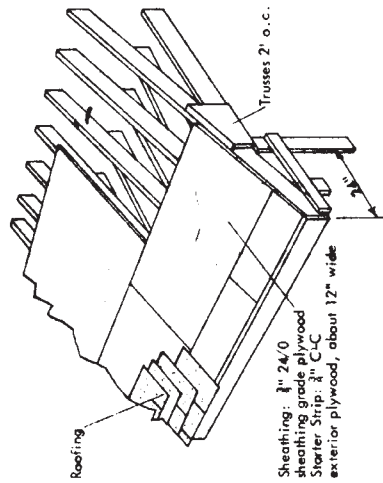
Lining: 1/2" gypsum wallboard on 7'-9" studs 24" o.c.
 3/4" gypsum wallboard on 7'-9" studs 16" o.c.

INTERIOR PARTITION



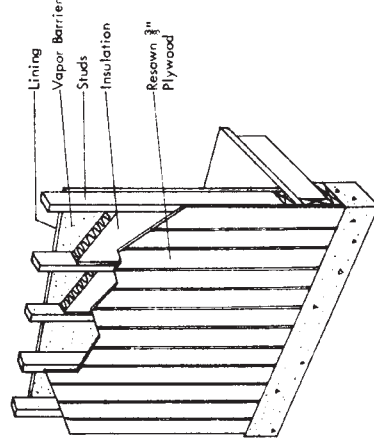
PARTY WALL

ONE-HOUR FIRE



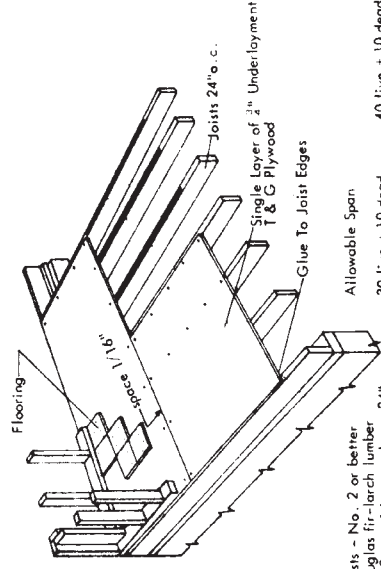
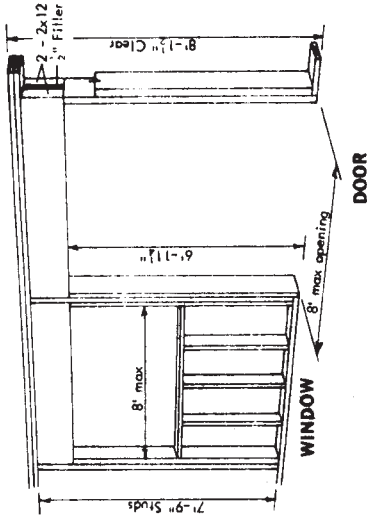
Sheathing - 3/4" 24/0 standard sheathing or C-C exterior plywood with face grain across the rafters
 Stagger end joints
 Roof edges at gutters: apply 12" wide strips of 3/4" C-C exterior plywood
 6d nails 6" apart along edges, 12" apart along intermediate rafters
 Roofing - 235# asphalt shingles; follow manufacturer's specifications for roofing felt and application

ROOF



Sill - 2x6 or 2x8 preservative treated, 3/4"x6" anchor bolt 8' o.c.
 Studs - Stud grade DF, SYP, or equiv. 2x4 x 7'-9", 16" o.c.
 Sheathing - none
 Siding - Resawn 3/4" plywood with battens 16" o.c., or Texture 1-11
 Finish: exterior, penetrating, oil base stain
 8d non-corrosive casing or siding nails 6" o.c. at panel edges, 12" o.c. at intermediate supports
 Nail shiplap joints with one row of nails at a slight angle thru the joint
 Caulking needed only at inside and outside corners
 Insulation - 3" fiberglass or equivalent R = 10 or more
 Vapor Barrier - 4 mil polyethylene
 Lining - 3/4" gypsum wallboard

EXTERIOR WALL - SINGLE SKIN



Joists - No. 2 or better Douglas fir-larch lumber 2x10 repetitive members, 24" o.c.
 Allowable Span
 30 live + 10 dead sleeping & attic
 17'-0" 15%
 16'-3" 19
 16'-1" 15%
 16'-1" 19
 40 live + 10 dead other areas
 15'-5" 15%
 14'-1" 19
 14'-7" 15%
 14'-7" 19

Underlayment - single layer of 3/4" plywood T&G (interior, or interior with exterior glue)
 Stagger end joints
 Leave 1/16" between sheets at side and end joints
 Site-applied elastomeric construction adhesive on joist faces and on T&G plywood joints
 Nailing: 6d deformed-shank, or 8d common, 12" spacing along all bearings
 If plywood is not T&G, block under all joints
 Finish - Tile, carpet, linoleum or other non-structural flooring

FLOOR - Single Underlayment

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3 or 4 - BEDROOM TOWNHOUSE
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