

MWPS-71003

4-Bedroom Townhouse

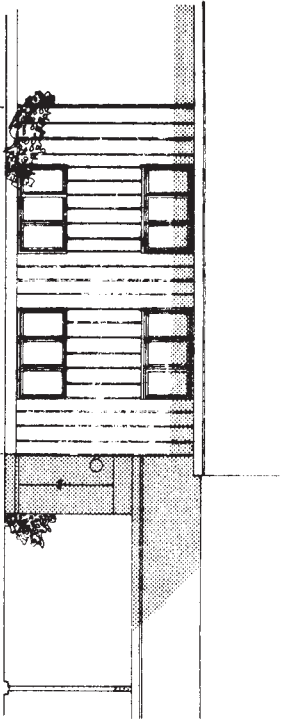
CAUTION!

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.**

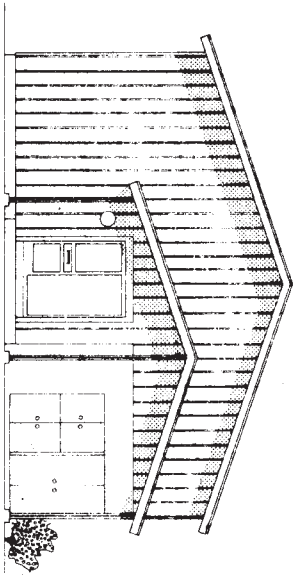
WARRANTY DISCLAIMER

This plan provides conceptual information only. **Neither midwest plan service nor any of the cooperating land-grant universities, or their respective agents or employees, have made, and do not hereby make, any representation, warranty or covenant with respect to the specifications in this plan.** 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.

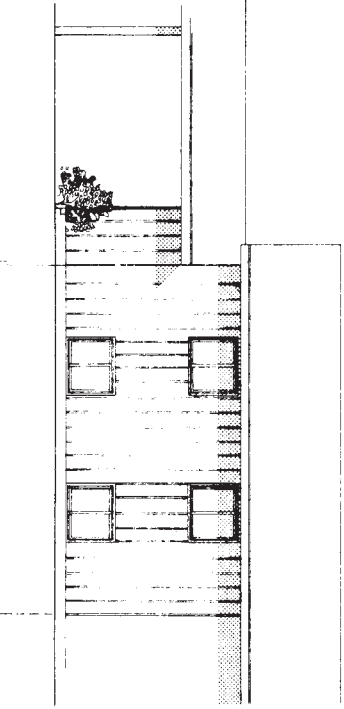
MIDWEST PLAN SERVICE
Cooperative Extension Work in Agriculture and Home Economics and Agricultural Experiment Stations of North Central Region - USDA Cooperating
4-Bedroom Townhouse
Title Page
MIDWEST PLAN NO. 71003



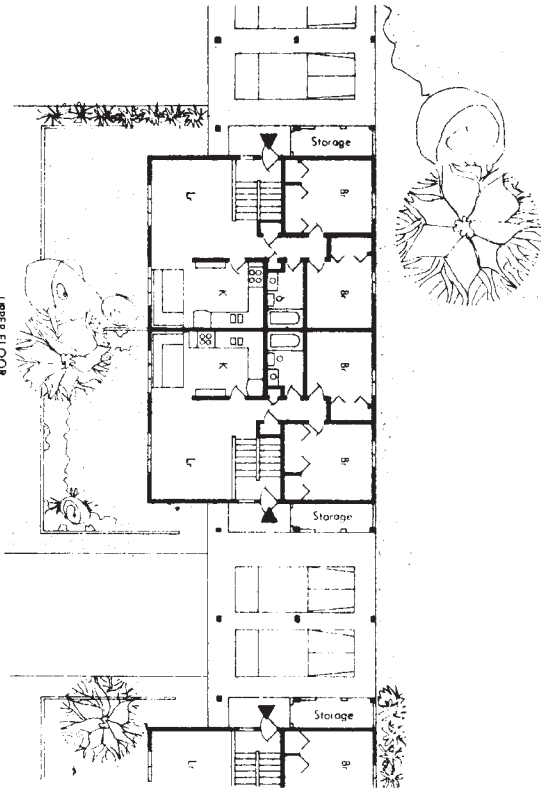
FRONT ELEVATION



SIDE ELEVATION
(Some Both Sides)



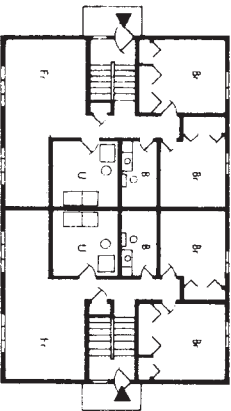
REAR ELEVATION



UPPER FLOOR

4-BEDROOM, SPLIT ENTRY PAIRED UNITS

Reverse layout front-to-back to take advantage of view, sun, slope, etc.
If street is in back reverse carpet front-to-back.



LOWER FLOOR

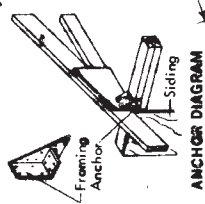
MIDWEST PLAN SERVICE
Cooperative Extension Work in
Agriculture and Home Economics
and Agricultural Experiment Stations
of North Central Region - USDA Cooperating

4 - BEDROOM TOWNHOUSE

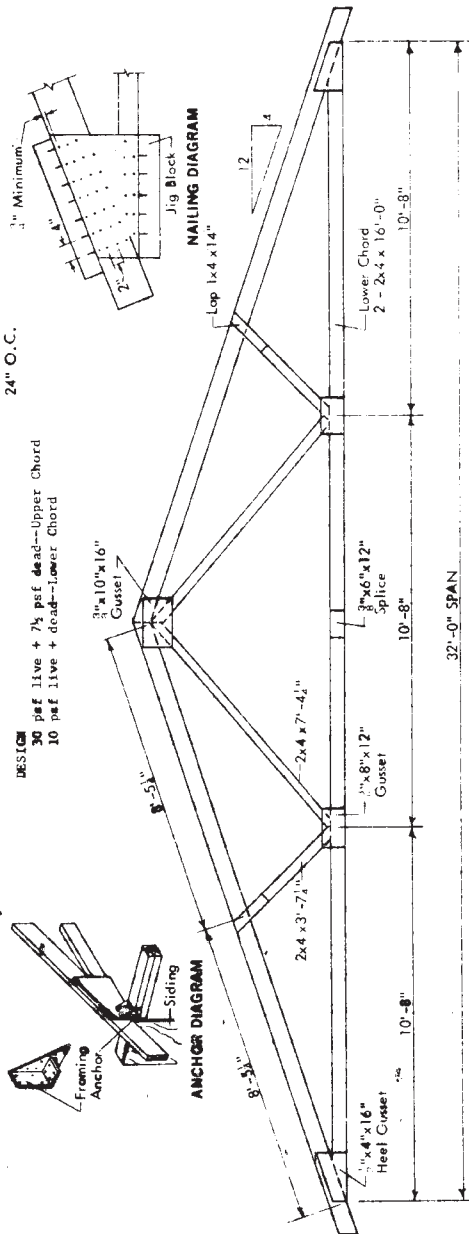
MIDWEST PLAN NO. 71003
Sheet 1 of 4 Sheets

32' TRUSS 24" O.C.

DESIGN
30 pcf Live + 7 1/2 pcf dead—Upper Chord
10 pcf Live + dead—Lower Chord



ANCHOR DIAGRAM



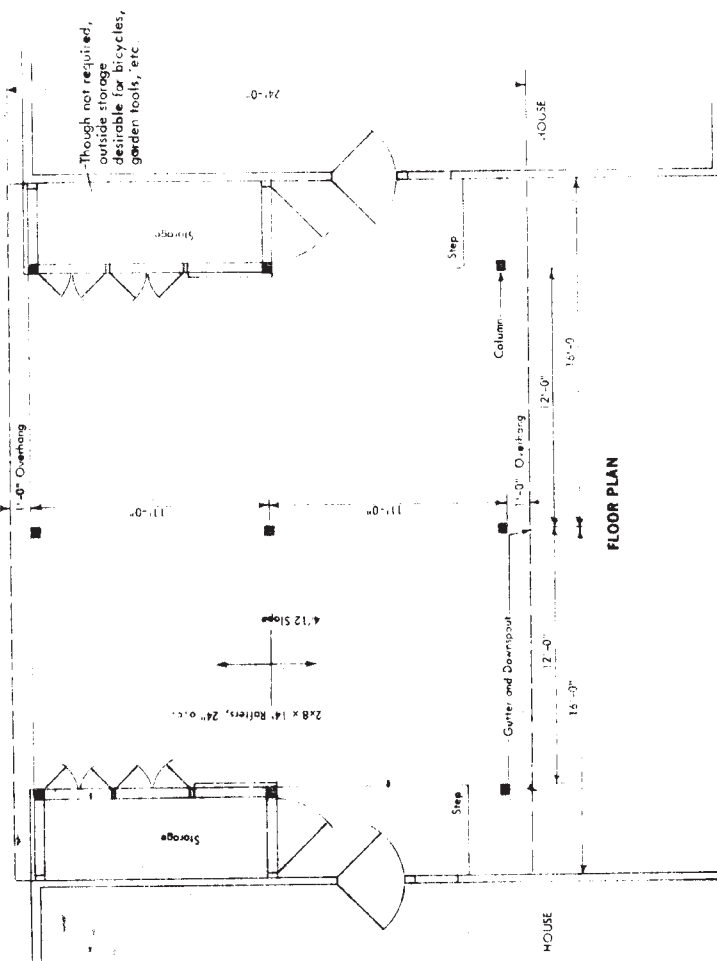
NOTES:
Use #2 Douglas Fir-Larch or equivalent, milled and used at 12s.
Use Exterior-type, CC Grade, Douglas Fir or Southern Pine Plywood. Interior type in either sanded or sheathing grades should not be used.

GLUE:
Glue (MPP-170, Type 11, mold resistant) is not water-proof, but is highly water resistant. Use it for trusses that will stay dry throughout their life. **Acrylic resin** is water-proof. 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.

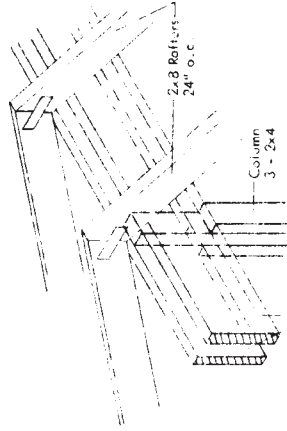
Remove all dirt, oil, and sand from the lumber and plywood. Protect the glue joints from moisture for one week after fabrication. Temperatures below 70° delay curing. Trusses can be erected in 24 hours at 70°, but need at least a week at 50°.

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 solvent 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.

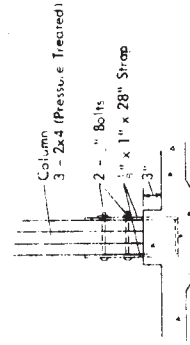
CARPENT DETAILS



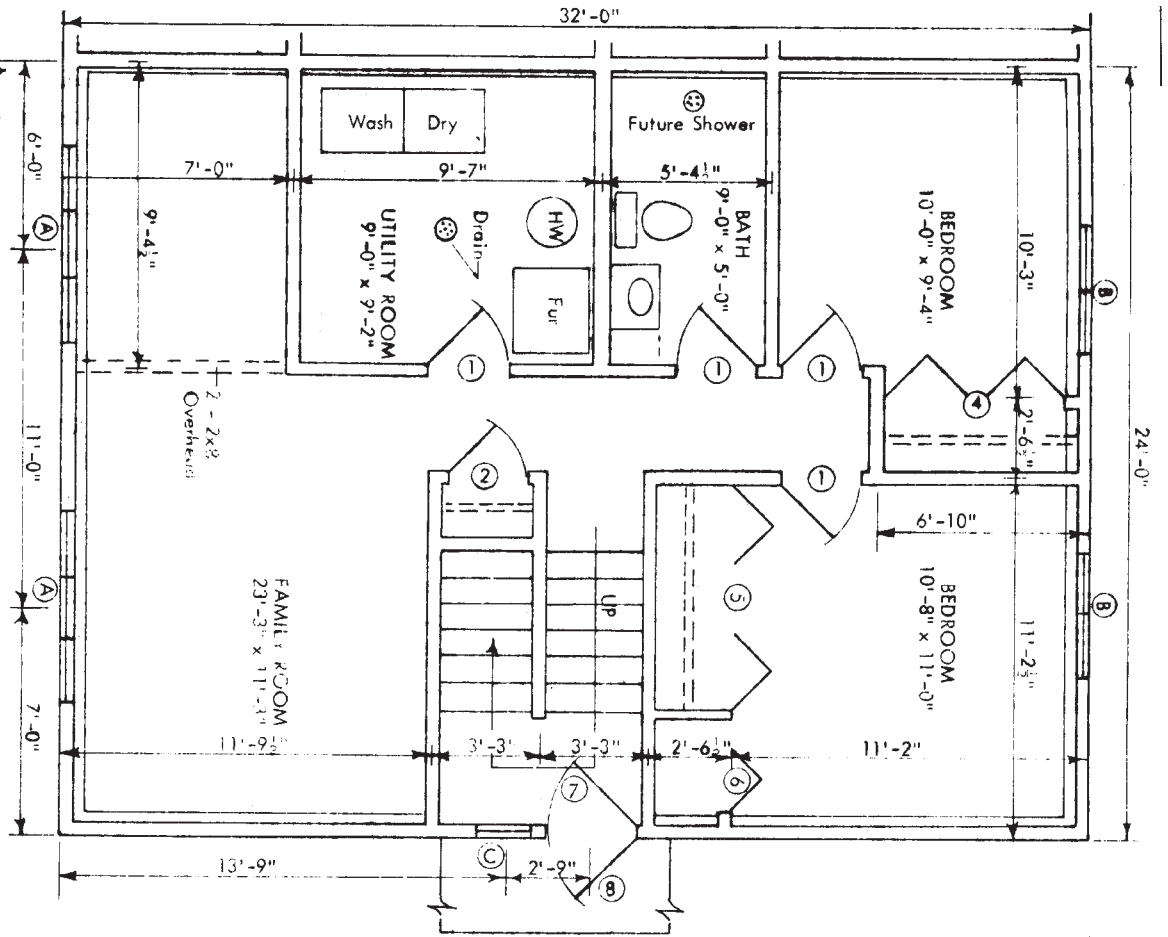
FLOOR PLAN



RAFTER-JOIST DETAIL



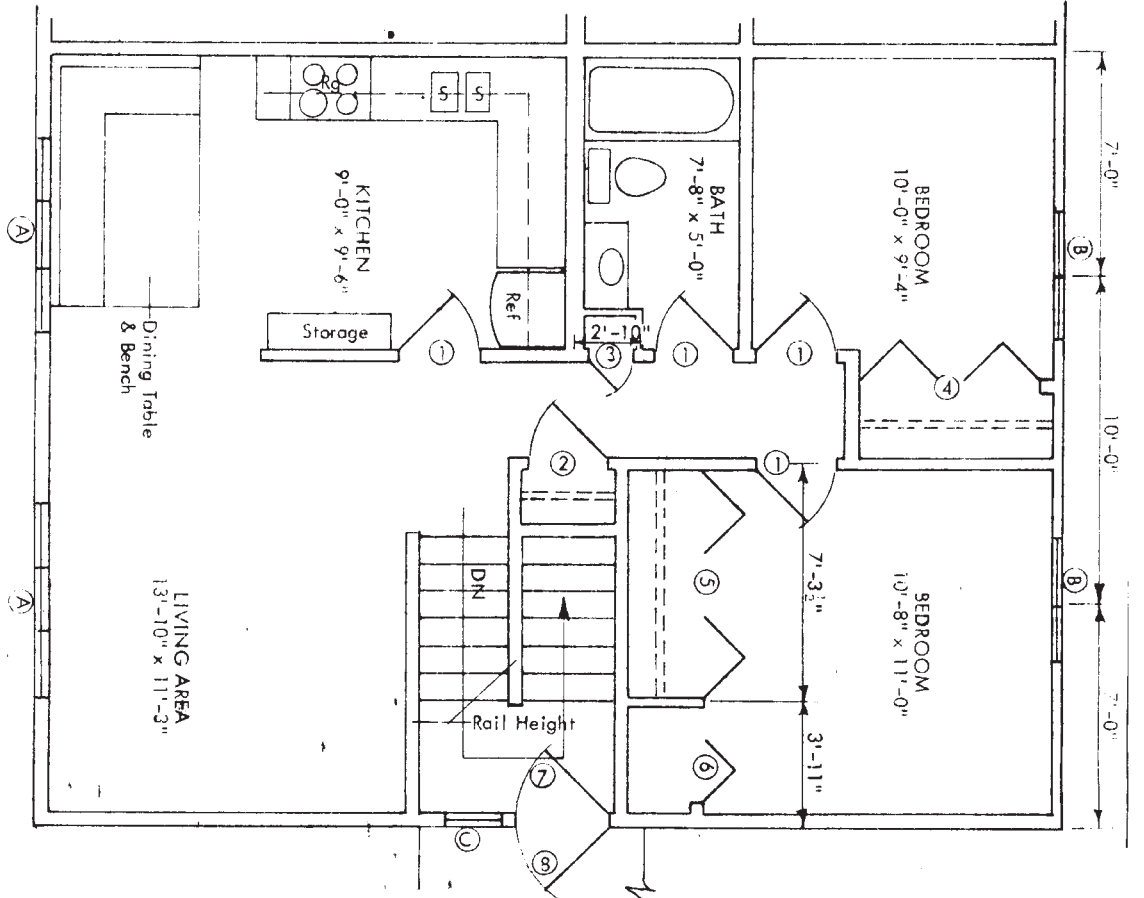
COLUMN FOOTING DETAIL



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

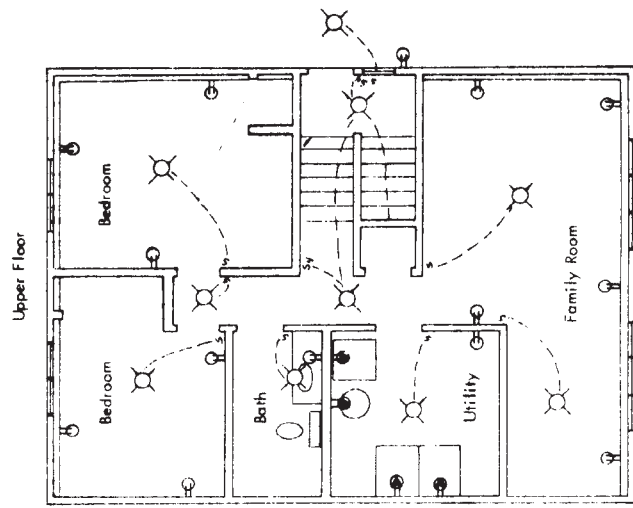
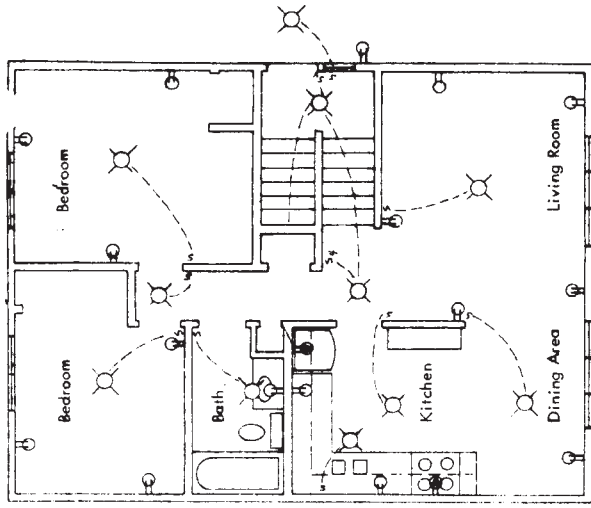
LOWER FLOOR

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

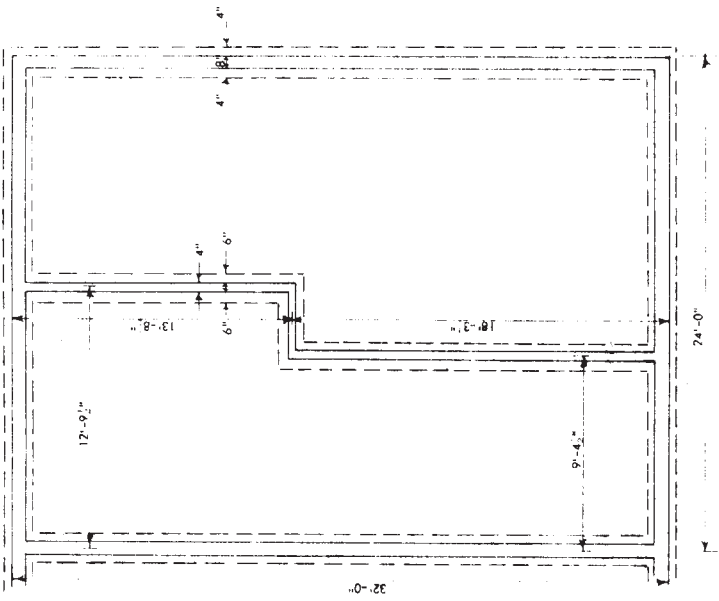


UPPER FLOOR

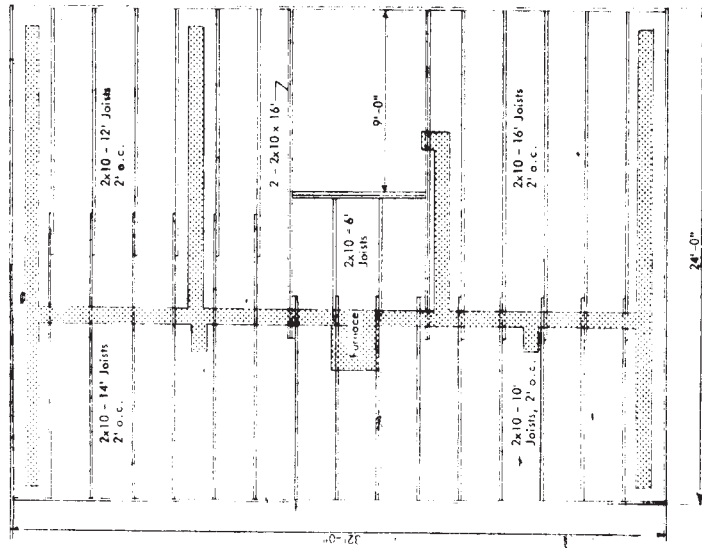
MIDWEST PLAN SERVICE
Cooperative Extension Work in
Agriculture, Home Economics,
and Agricultural Experiment Stations
of North Central Region - USDA Cooperative
4-BEDROOM TOWNHOUSE
Sheet 2 of 4 Sheets
MIDWEST PLAN NO. 71003
Copyright © 1972 Midwest Plan Service



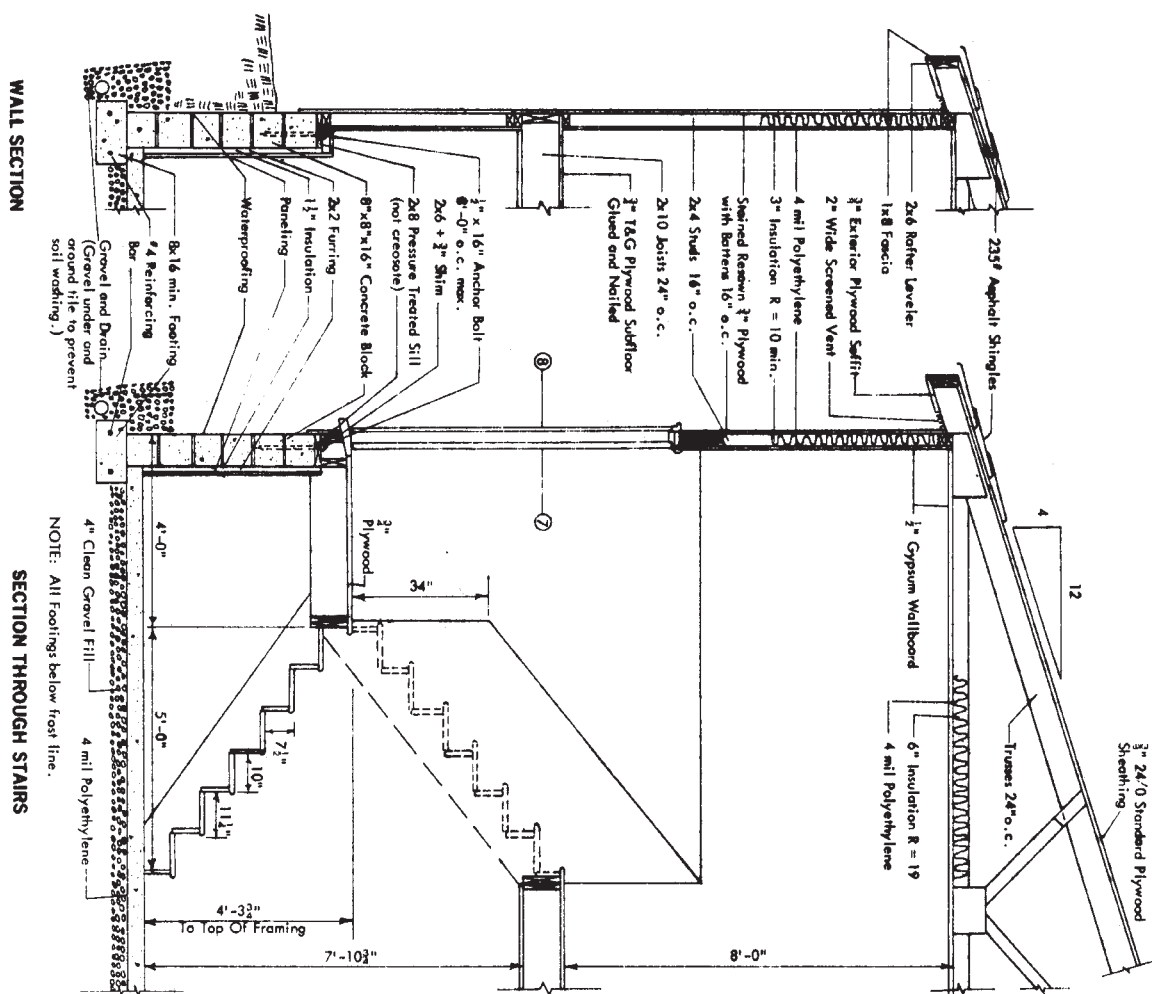
Lower Floor
ELECTRICAL LAYOUT



FOUNDATION PLAN



HEATING DUCT LAYOUT



MARK	WIDTH	SIZE		REMARKS	REQUIRED
		HEIGHT	THICK		
1	2'-6"	6'-8"	1 3/8"	Hollow Interior	10
2	2'-0"	6'-8"	1 3/8"	Hollow Interior	2
3	1'-6"	6'-8"	1 3/8"	Hollow Interior	1
4	6'-0"	6'-8"	1 3/8"	Bifold*	2
5	7'-0"	6'-8"	1 3/8"	Bifold*	2
6	3'-0"	6'-8"	1 3/8"	Bifold*	2
7	3'-0"	6'-8"	1 3/8"	Exterior Combination Storm-Screen Tempered Glass	1
8	3'-0"	6'-8"	-	-	-

*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.

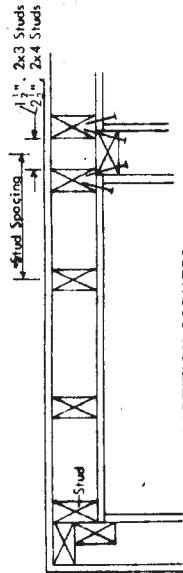
MARK	TYPE	GLASS SIZE		DESCRIPTION	NUMBER REQUIRED
		WIDTH	HEIGHT		
A	Sliding	6'-0"	3'-6"	Sized for Fire Exit (not casement because of cost)	4
B	Sliding	4'-0"	3'-6"	Sized for Fire Exit (not casement because of cost)	4
C	Fixed	2'-0"	6'-8"	Double Glazed	1

MIDWEST PLAN SERVICE
 Cooperative Extension Work in
 Agriculture and Home Economics
 and Agricultural Experiment Stations
 of North Central Region - USDA Cooperative

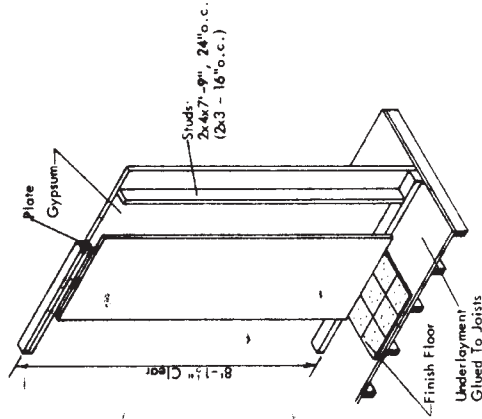
4 - BEDROOM TOWNHOUSE

Sheet 3 of 4 Sheets

MIDWEST PLAN NO. 71003
 Copyright © 1972 Midwestern Plan Service



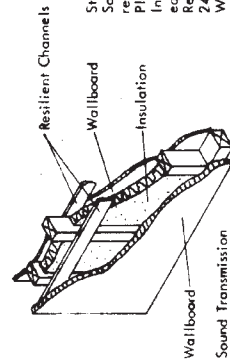
PARTITION CORNERS



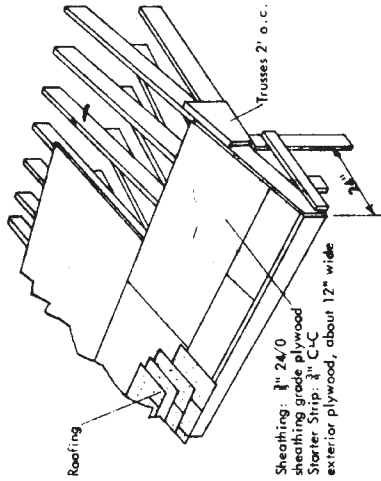
Studs - Sole, or Plate: Stud grade DF, SYP, or equiv.
 Studs: Upstairs - 2x4x7'-9", 24" o.c.
 Downstairs - 2x4x7'-6", 24" o.c.

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

INTERIOR PARTITION

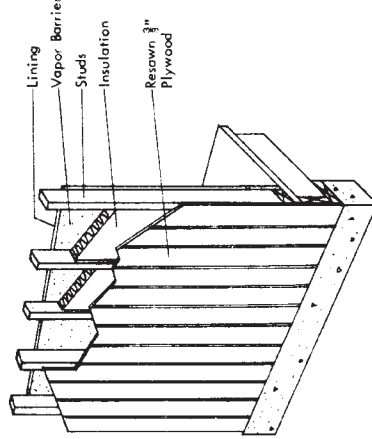


PARTY WALL
 ONE-HOUR FIRE RATING



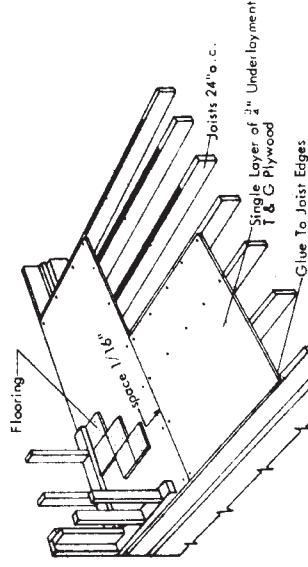
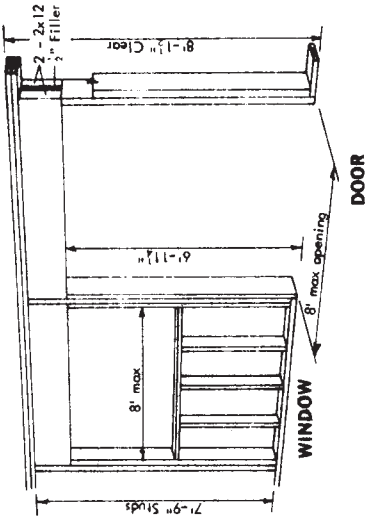
Sheathing - 3/4" 24/0 standard sheathing or C-C exterior plywood with face grain across the rafters
 Stagger end joints
 Roof edges at gutters: apply 12" wide strips of 3/4" C-C exterior plywood
 6d nails 6" apart along intermediate rafters
 Roofing - 235# asphalt shingles; follow manufacturer's specifications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

ROOF



Sill - 2x6 or 2x8 preservative treated, 1/4x6" anchor bolt 8" o.c.
 Studs - Stud grade DF, SYP, or equiv. 2x4 x7'-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 - 1/2" gypsum wallboard

EXTERIOR WALL - SINGLE SKIN



Joists - No. 2 or better Douglas fir-larch lumber 2x10 repetitive members, 24" o.c.
 Grade # Moist'
 No. 1 15%
 No. 2 15%
 No. 3 15%
 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

MIDWEST PLAN SERVICE	
Cooperative Extension Work in Agriculture and Home Economics and Agricultural Experiment Stations of North Central Region - USDA Cooperating	
3 or 4 - BEDROOM TOWNHOUSE	
Sheet 4 of 4 Sheets	
MIDWEST PLAN NO. 71002 or 71003	
Copyright © 1972 Midwest Plan Service	