

MWPS-74002

Pesticide Storage and Mixing Building

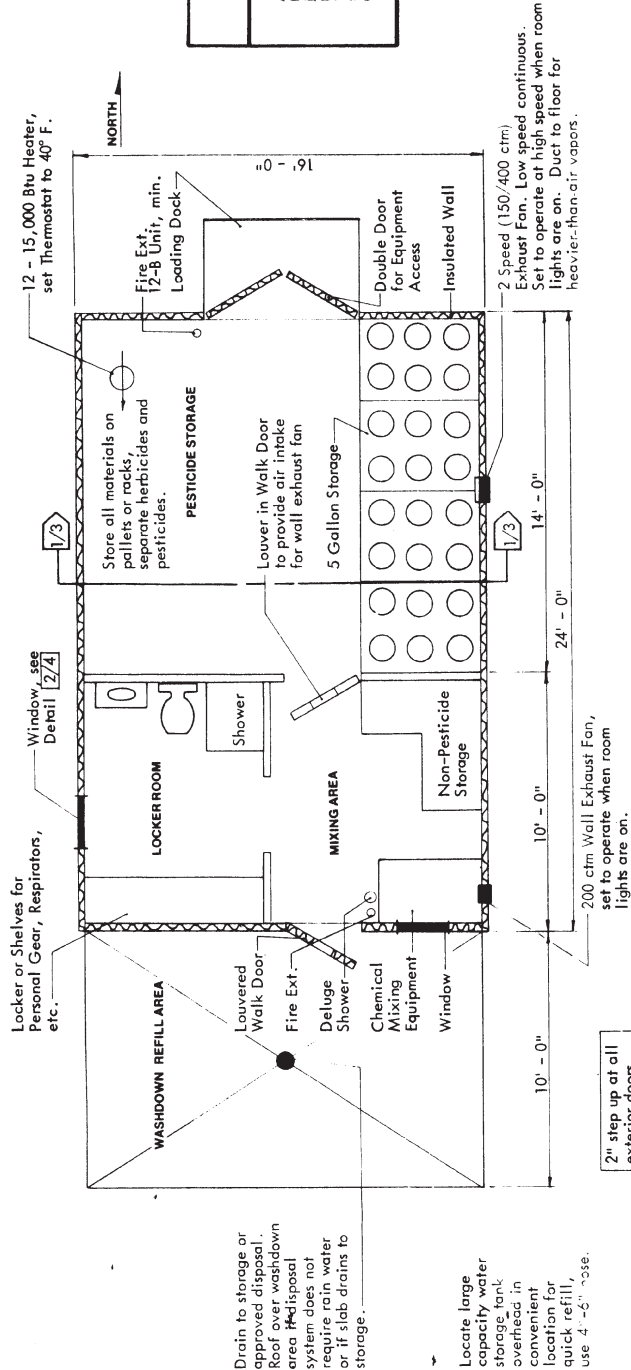
CAUTION!

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.

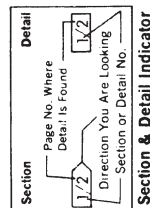
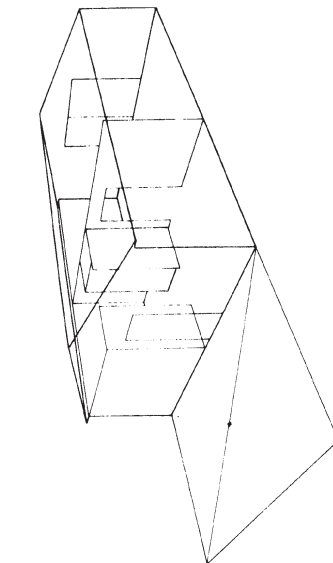
MIDWEST PLAN SERVICE
Cooperative Extension Work in Agriculture and Home Economics and Agricultural Experiment Stations of North Central Region - USDA Cooperating
Pesticide Storage & Mixing Building
Title Page
MIDWEST PLAN NO. 74002



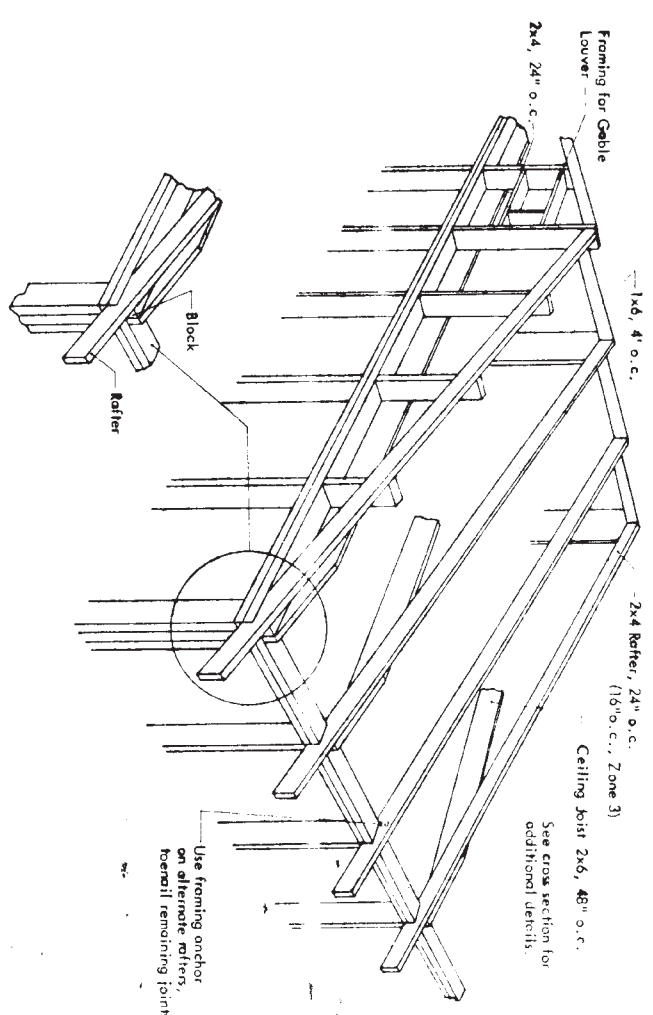
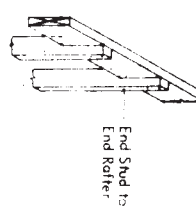
FLOOR PLAN—1/1

- NOTES:**
- With prevailing winds from the west, orient the building ridge north-south with the storage area to the north. With this orientation, prevailing winds will blow across entrances instead of into them, carrying toxic fumes from mixing and filling operation away from the building.
 - Surround the area with a security fence, provide locks for exterior doors.
 - Place signs to warn of dangerous chemicals. Chemicals marked with a skull and crossbones are highly toxic. Solids are usually handled as granules, dusts, and powders. This presents a dust explosion hazard when these materials are dispersed into the air.
 - Precise calculations and care in mixing can greatly reduce leftover pesticides. Consult with state and local officials for approved disposal methods.
 - Consider direct-load mixing equipment for increased safety.
 - Install vacuum breakers on water lines used for filling rigs to prevent backflow of pesticides into the water supply.
 - Install stop and waste valves on all lines entering untreated areas.

- Contact state and local officials to verify compliance with all current regulations in your area.
- Locate the building on sites where flooding is unlikely. Choose an area such that natural runoff from the storage area or seepage through soil or runoff from fire fighting will not contaminate residential areas, livestock feeding areas, streams or ponds.
- Use a mechanical can crusher to properly dispose of 5-gallon cans.



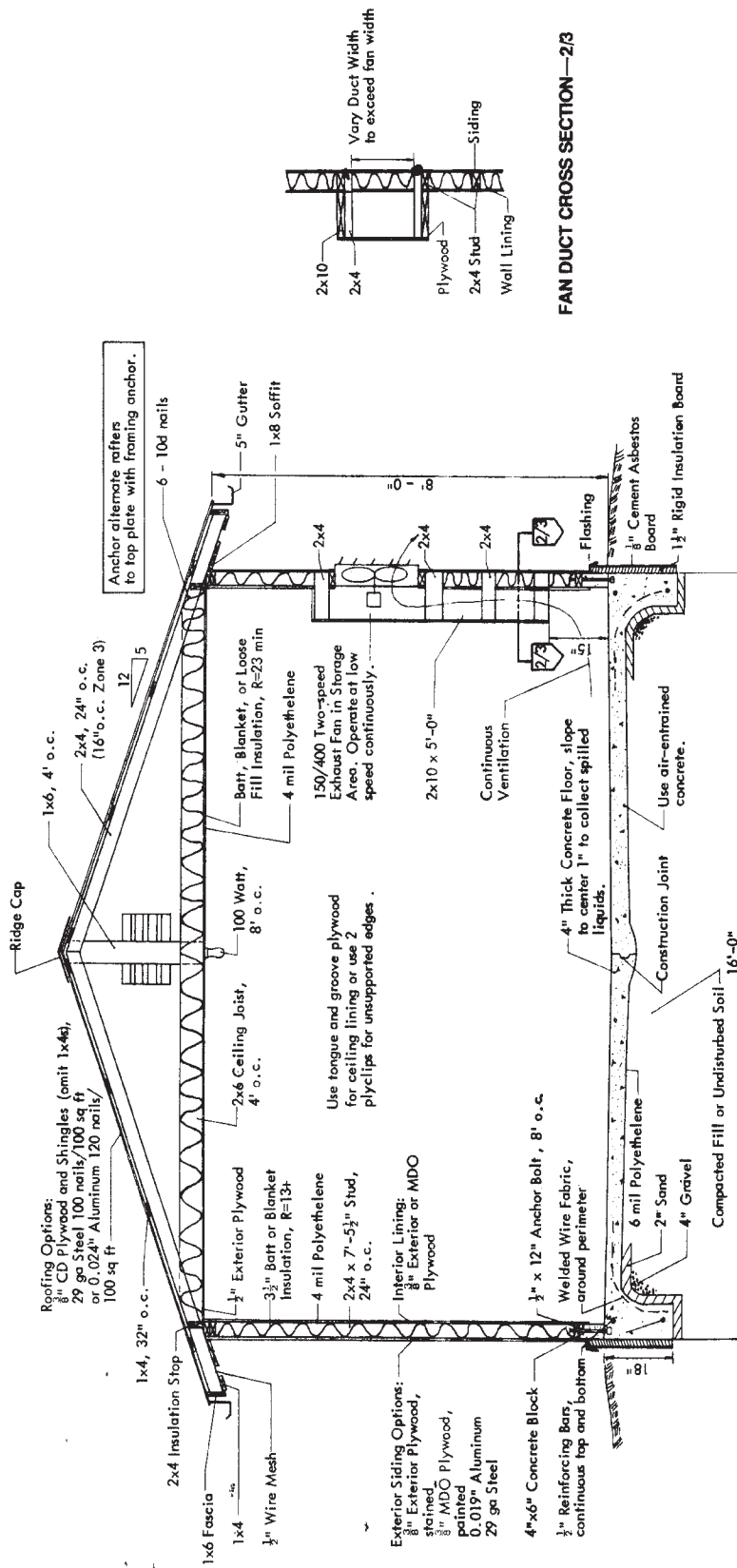
MWPS MIDWEST PLAN SERVICE Cooperative Extension & Research in Agriculture & Home Economics in the 12 North Central Universities—USDA Cooperating			
PESTICIDE STORAGE AND MIXING BUILDING			
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CEILING AND ROOF FRAMING DETAIL—1/2

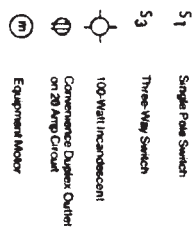
Quantity	Description
60	2x4x7 5/8" Studs
16	2x4x20 Sills and Plates
28	2x4x10 Nailing
6	2x6x16 Gable Joists
2	2x4x16 Gable End Framing
7	1x6x8 Waller Supports
45	1x4x8 Studs
1	1x4x8 Truss Trusses
10	1x6x8 (not plywood or Tally Soft- fins
700 ft	Well Lining
400 ft	Ceiling Lining
300 ft	Roofing Material
450 ft	Roofing Material
40	3 1/2" x24" x8 Ball or Banner Wall Insulation
200 ft	Ceiling Insulation
20	3 1/2" x24" x8 Perimeter Insulation
10	Boards
10	1 1/2" x24" x8 Cement Abbrassions
60	3 1/2" x36" x15 1/2" Yellow Core Concrete Blocks
14	1 1/2" x12" Anchor Bolts
10 yards	Air-Entrenched Concrete
10	Sand and Gravel Fill as Required
400 ft	6 mil Polyethylene
2	15-Gal Fire Extinguishers
1	De-lug Shoe
2	Covered Walk Doors
1	Double Walk Door
12	12" x12" Dowell Langers
4	22" x22" Dowell Strength Glass

Miscellaneous Framing for Windows and Doors
Electrical Equipment, see Details
1/4
Plumbing for Locker Room and
Mixing Equipment



FAN DUCT CROSS SECTION—2/3

CROSS SECTION—1/3



NOTES:

Ground all noncurrent-carrying equipment and wiring at the same point. Do not use the equipment frame as a ground.

Wires: Provide overcurrent protection for branch circuits or conductors Use 12 AWG minimum copper wire or equivalent.

Personal protection: Use proper personal protection when working with light switches for operation where personnel may be exposed to live parts.

Lockout/tagout: Use lockout/tagout with any electrical work on the main bus to meet the requirements of the National Electrical Code Class 1, Division 1 installations.

Conductive electrical switches and conductors outside the room to indicate device location and component status.

Install all electrical work in the main area to meet the requirements of the National Electrical Code Class 1, Division 1 installations.

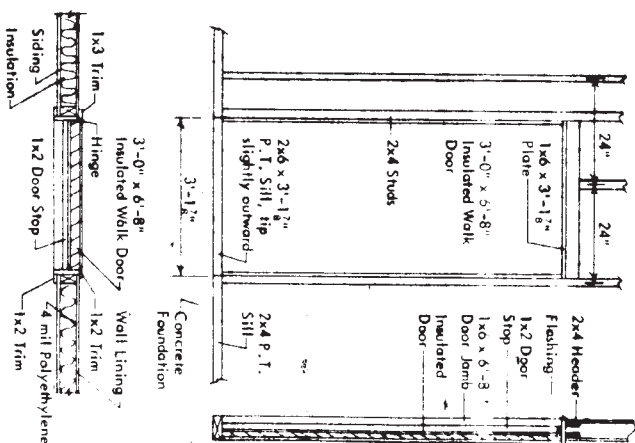
Conductive electrical switches and conductors outside the room to indicate device location and component status.

General Provisions—Class 1 Division 1 Installations

Place wiring in insulated metal conduit or Type IIIc cable with approved termination fittings. Use explosion proof boxes, fittings, and joints treated for connection to non-ferrous cable.

Seal conduit and cables to prevent passage of vapors and gases from one section of the electrical installation to another. Use gaskets on tight fixtures.

Motors, switches, circuit breakers, controllers must be approved for Class 1 installations.



WALK DOOR DETAIL--3/4"