UNIVERSITY OF MISSOURI
Extension

STORM SHELTER & SAFE ROOM PACKET

Information compiled by:
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This packet includes:
Online Resources
Information Article
Partial list of Storm Shelter and Safe Room Manufacturers
In-Ground Storm Cellar Plan

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ONLINE RESOURCES

National Oceanic and Atmospheric Administration (NOAA)
Online Tornado FAQs: www.spc.noaa.gov/faq/tornado/
Storm Prediction Center: www.outlook.noaa.gov/tornadoes/
Tornado Safety Guide: www.nssl.noaa.gov/edu/safety/tornadoguide.html

Texas Tech University's Wind Science and Engineering Research Center
www.depts.ttu.edu/weweb/Shelters/Shelters.php

Selection considerations for storm shelters and safe rooms
www.tornadoproject.com/httpdocs and
www.tornadoproject.com/httpdocs/safety/moreonshelters.htm#top

FEMA Safe Room Resources: http://www.fema.gov/safe-room-resources

FEMA 320 Taking Shelter From the Storm: Building a Safe Room For Your Home or Small Business www.fema.gov/plan/prevent/saferoom/fema320.shtm

FEMA Public and Community Shelters and Safe Rooms
www.fema.gov/plan/prevent/saferoom/public.shtm

FEMA How-To Series (with diagrams): www.fema.gov/plan/prevent/howto/index.shtm

National Storm Shelter Association: www.nssa.cc/Home.php

Tornadoes Prompt Interest in Storm Shelters and 'Safe Rooms'

The devastating tornadoes that hit southwest Missouri in 2003, 2006, 2008 and 2011 have caused many Missourians to take a closer look at their vulnerability to nature's wrath and to make better preparations for surviving future storms, said Bob Schultheis.

The natural resource engineering specialist with University of Missouri Extension said having a shelter or a 'safe room', built into or near the home can help protect families from injury or death caused by the dangerous forces of extreme winds.

"All of Missouri is in Wind Zone IV, meaning wind gusts from severe storms can exceed 250 miles per-hour. The number of recorded tornadoes is 5-15 per 2,470 square miles for much of the state, Schultheis said. "Combining these factors places the entire state at a high risk level that warrants a shelter as the preferred method of protection."

The shelter or safe room should be free of clutter and readily accessible from all parts of the house. It must be located in a flood-free area, well-anchored to resist overturning and uplift, and the walls, roof and door made strong enough to resist penetration by wind-borne missiles.

"Common house construction techniques based on "minimum" building codes generally don't provide adequate protection. Most Missouri counties do not have even these minimum building codes."

To help homeowners and builders design and build shelters that do withstand extreme wind speeds, the Federal Emergency Management Agency has a 46-page booklet entitled FEMA 320 "Taking Shelter from the Storm: Building a Safe Room For Your Home or Small Business," which includes 18 pages of construction plans and cost estimates. A free copy can be obtained by calling FEMA toll-free at 1-888-565-3896 or visit their Web site at *www.fema.gov/plan/prevent/saferoom/fema320.shtm*

Also, USDA Plan #6209, Storm Cellar, is a one-page working drawing for building two sizes of in-ground concrete storm cellars (8 ft. x 16 ft. and 5 ft. x 10 ft.). The drawing is available through the University of Missouri's Agricultural Engineering Department by calling toll-free 1-800-995-8503 or online at www.ag.ndsu.edu/aben-plans/6209.pdf.

"Whether you build a shelter or not, two important steps you can take to protect your family are to prepare an emergency plan for dealing with disaster situations and put together an emergency supply kit for home, business and each vehicle," said Schultheis.

More information on emergency preparedness and disaster recovery is available online at extension.missouri.edu/main/DisplayCategory.aspx?C=10.

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PARTIAL LIST OF
STORM SHELTER & SAFE ROOM MANUFACTURERS SERVING MISSOURI

For informational purposes only; no endorsement is implied by their mention.

Within Missouri

Atlas Safe Rooms
101 N. Rangeline Rd., Joplin, MO 64801
Phone: 800-781-0112
E-mail: jessica@atlassaferooms.com
Web: www.atlassaferooms.com

Earth Storm Shelters, Earth Manufacturing, LLC
7627 Cherokee Rd, Norwood, MO 65717
Phone: 417-746-0043
E-mail: info@earthwoodfurnace.com
Web: www.earthstormshelters.com

FamilySAFE
3230C S. National, Springfield, MO 65807
Phone: 417-693-7504 or 417-887-7469
E-mail: rrayl@varsityfs.com or
jwherley@varsityfs.com
Web: www.familysafemo.com

Life Shelter
166 Stevens Dr., Marshfield, MO 65706
Phone: 417-859-5911 or 417-425-5350
E-mail: norm@lifeshelter.biz
Web: www.lifeshelter.biz

Missouri Storm Shelters, Inc.
1839 N. Commerce Dr., Nixa, MO 65714
Phone: 417-725-0055
Web: www.missouristormshelters.com

Northwest Missouri Shelters
Savannah, MO 64485
Phone: 816-432-4358
E-mail: info@nwmissourishelters.us
Web: www.nwmissourishelters.us/

Ozark Wilbert Concrete Products
1451 N Farmer Branch Rd, Ozark, MO 65721
Phone: 888-262-7383 or 417-581-3060
Web: www.siprecast.com

Ozark Wilbert Vault Co.
2850 E Barton St., Springfield, MO 65804
Phone: 417-883-2355
Web: www.siprecast.com

Ozark Wilbert Vault Co.
310 Spruce St., Cabool, MO 65689
Phone: 417-962-3126
Web: www.siprecast.com

Calus Precast Concrete
211 East 20th St., Mountain Grove, MO 65711
Phone: 417-259-4283

Reliable Storm Shelters
Carthage, MO 64836
Phone: 417-850-5562 or 417-861-7178
Web: www.reliablestormshelters.com

Ron Norris
7911 C.R. 5090, West Plains, MO 65775
Phone: 417-274-8774
Email: rlnoris@centurylink.net
Builds poured-in-place concrete safe rooms within 100-mile radius of West Plains

The Concrete Works, LLC
One Concrete Way, HCR 72 Box 374
Souder, MO 65773
Phone: 417-265-3504
E-mail: info@theconcreteworks.com
Web: www.theconcreteworks.com

Tornado Guard™
21205 N Ponderosa Rd, Clark, MO 65243
Phone: 866-303-8575 or 573-687-3253
Fax: 573-687-3255
Email: info@tornadoguard.com
Web: tornadoguard.com

TwisterSafe™, LLC
7661 Hwy. P, Neosho, MO 64850
Phone: 888-782-1039 or 417-782-1039
E-mail: sales@twistersafe.com
Web: www.twistersafe.com

Outside Missouri

Arkansas Storm Shelters
605 A Reasoner Ln, Russellville, AR 72801
Phone: 877-766-8873 or 501-766-8873
E-mail: info@arkansasstormshelters.us
Web: www.arkansasstormshelters.us/

Canton Enterprises
701 West Railroad, P.O. Box 135
Canton, KS 67428
Phone: 888-323-3123
E-mail: info@stormshelters.biz
Web: www.stormshelters.biz/

Cozy Caverns™ Storm Shelters
135 Parris Ln, Austin, AR 72007
Phone: 501-920-7460
E-mail: jhg@cozycaverns.com
Web: www.cozycaverns.com

DuPont™ StormRoom™
Distributed by: StormSolutions
207 Caddie St., Berryville, AR 72616
Phone: 888-578-6769
E-mail: info@stormsolutions.us
Web: www.stormsolutions.us

Fiberglass Creations Inc.
PO Box 2042, 1601 Hamlett
Henderson, TX 75653
Phone: 877-957-6616 or 903-657-6616
Email: fibercreate@tyler.net
Web: www.fiberglasscreations.com

Ground Zero Storm Shelters
4600 Independence, Perry, OK 73077
Phone: 877-880-1351 or 405-627-2245
E-mail: richard@groundzeroshelter.com
Web: www.groundzeroshelters.com

Hausner's Inc.
505 North Griffith, P.O. Box 32
Drumright, OK 74030
Phone: 800-533-9509 or 918-352-3479
E-mail: hausnersprecast@earthlink.net
Web : www.hausners.com

Jarrell Storm Shelters
911 N 1st St., Jarrell, TX 76537
Phone: 866-817-0293 or 512-746-4272
E-mail: shelters@jarrellstormshelters.com
Web: jarrellstormshelters.com

Lifesaver Storm Shelters
450 East Illinois Ave., Benton, IL 62812
Phone: 618-435-3833
E-mail: info@sheltersonline.com
Web: www.sheltersonline.com/dealer/Missouri.html

Mauzey Construction
4393 252nd Road, Arkansas City, KS 67005
Phone: 620-442-8698
E-mail: info@mauzeyconstruction.com
Web: www.mauzeyconstruction.com

NEA Storm Shelters
3132 CC Rd, Ravenden Springs, AR 72460
Phone: 870-892-0257

New Day Tornado Shelters
9265 Mockingbird, Talala, OK 74080
Phone: 918-277-3758
Fax: 918-275-4897
E-mail: dirkderose@aol.com
Web: www.newdaytornadoshelters.com

Providence Safe Rooms, Inc.
14919 Lebanon Rd. "B", Old Hickory, TN 37138
Phone: 855-758-8038 or 615-758-8038
E-mail: cindi@providencesaferooms.com
Web: www.providencesaferooms.com

RemagenSafeRooms
P.O. Box 585, Monteagle, TN 37356
Phone: 888-397-7142
E-mail: info@remagensaferooms.com
Web: www.remagensaferooms.com/

SafeSheds, Inc.
7029 Parrill Rd, Alma, IL 62807
Phone: 888-556-1531
Web: www.safesheds.com

Steel Storm Shelters, LLC
65 Pleasant Springs Ln, Henderson, TN 38340
Phone: 866-427-8044
Web: www.steelstormshelters.com

Storm Safe Rooms
13614 N Old Highway 169, Collinsville, OK 74021
Phone : 800-324-9322 or 918-519-0576
E-mail: info@stormsaferoom.com
Web: www.stormsaferoom.com

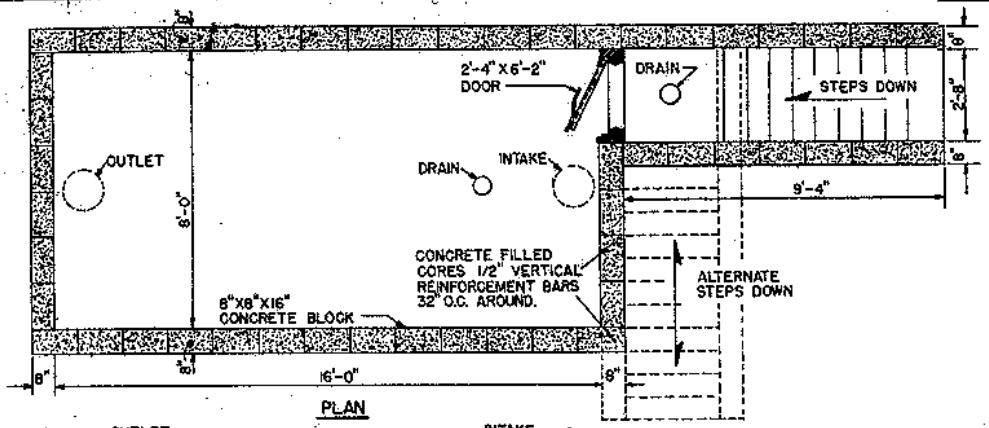
StormX Shelters, LLC
4496 Highway 78, Dyersburg, TN 38024
Phone: 877-903-7233 or 731-589-1955
E-mail: stormxshelters@aol.com
Web: www.stormxshelters.com

The Perfect Storm Shelter, SMP Welding LLC
8171 Tyler Blvd, Mentor, OH 44060
Phone: 440-946-0577
Email: deidre@smpwelding.com
Web: www.theperfectstormshelters.com

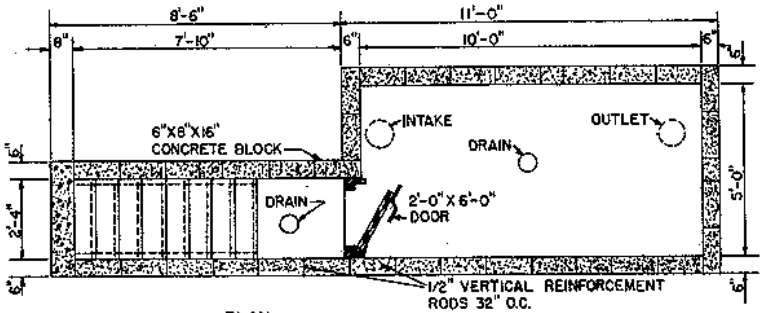
TornadoSafeRoom™
Distributed by: Floyd Arnold
P.O. Box 10238, Murfreesboro, TN 37129
Phone: 1-877-723-7666
E-mail: floydarnold@comcast.net
Web: www.tornadosaferoom.com/

U.S. Storm Shelters
443 PR 4215, Decatur, TX 76234
Phone: 800-868-5799 or 800-379-9712
E-mail: info@usstormshelters.com
Web: www.usstormshelters.com

There may be other local companies making concrete storm shelters as well. They are usually listed online or in the Yellow Pages as the same companies that sell septic tanks.



PLAN



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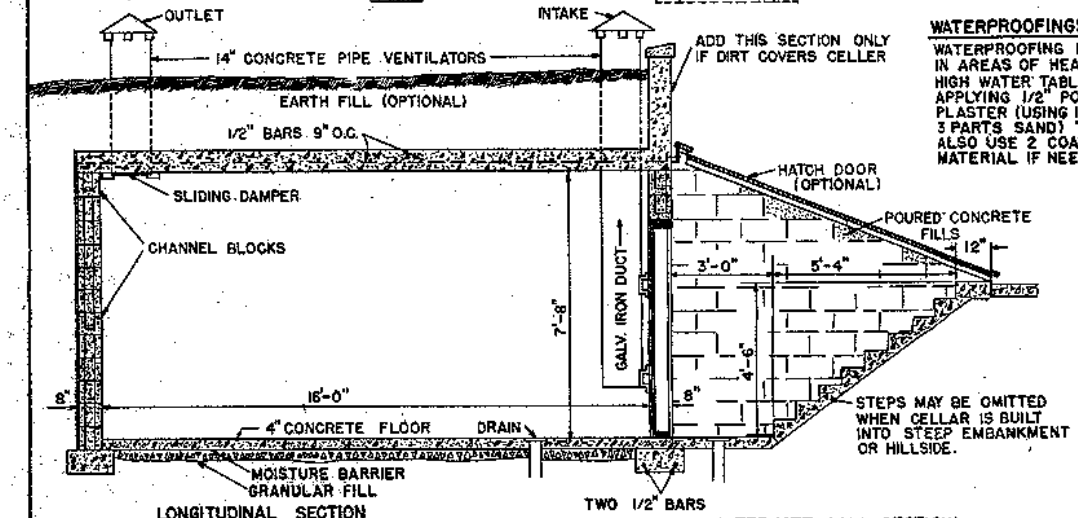
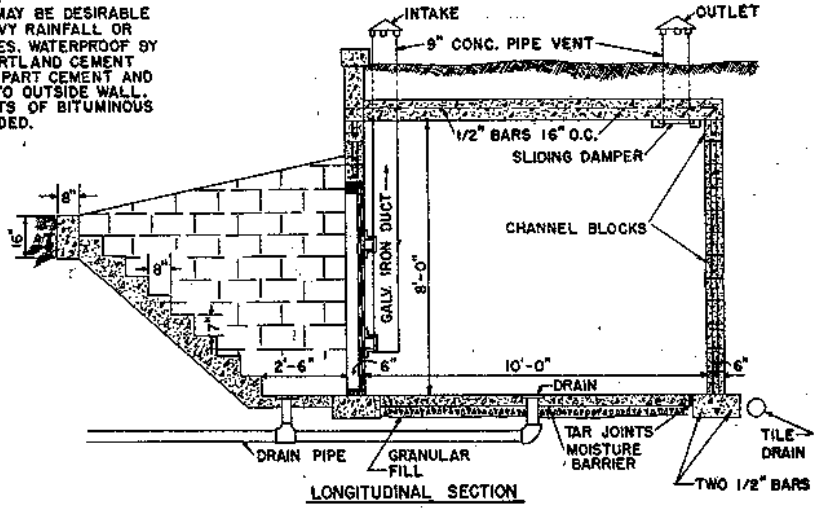


LONGITUDINAL SECTION

WATERPROOFING:

WATERPROOFING MAY BE DESIRABLE IN AREAS OF HEAVY RAINFALL OR HIGH WATER TABLES. WATERPROOF BY APPLYING 1/2" PORTLAND CEMENT PLASTER (USING 1 PART CEMENT AND 3 PARTS SAND) TO OUTSIDE WALL. ALSO USE 2 COATS OF BITUMINOUS MATERIAL IF NEEDED.



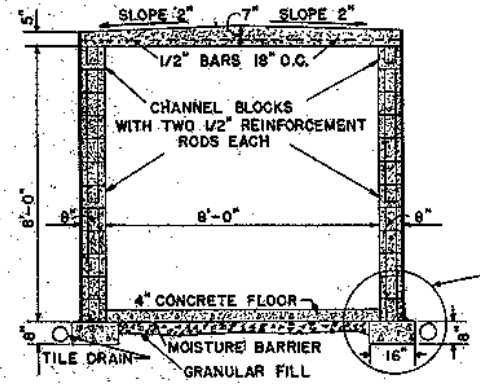
LONGITUDINAL SECTION

ALTERNATE WALL SECTION:

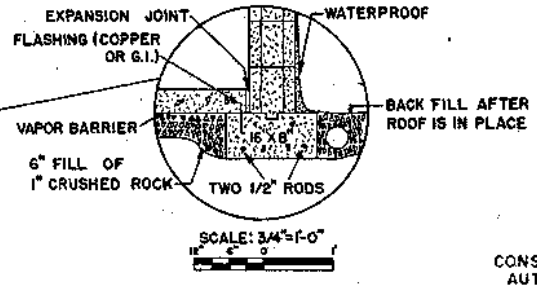
A 6" POURED CONCRETE WALL MAY BE USED. THE STEEL REINFORCING MUST BE 1/2" REINFORCING RODS 12" ON CENTER EACH WAY.

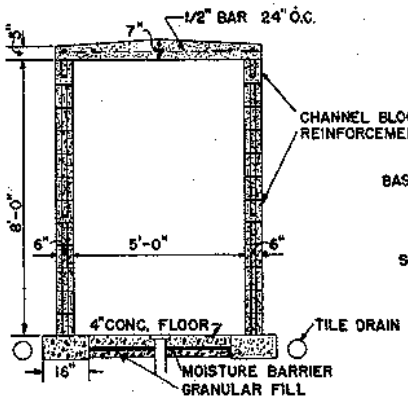
NOTE:

FLOOR DRAINS MAY BE USED IF THERE IS A LOWER AREA NEARBY TO WHICH WATER MAY BE DRAINED. IF A SUMP IS USED, EQUIP IT WITH AN AUTOMATIC PUMP.



CROSS SECTION





CROSS SECTION

BASED ON: AUBURN UNIV. PLAN NO. U-113 & U-114

SCALE: 3/8"=1'-0" UNLESS OTHERWISE NOTED.

CONSULT LOCAL HEALTH AND BUILDING CODE AUTHORITIES BEFORE STARTING CONSTRUCTION

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS

AND UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING

STORM CELLAR

ALA.	'75	6209	SHEET 1 OF 1