

**BY ORDER OF THE
BASE COMMANDER**



**GRAND FORKS AIR FORCE BASE
INSTRUCTION 32-102**

15 DECEMBER 2003

Civil Engineer

HOUSING EXTERIOR APPURTENANCES

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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OPR: 319 CES/CEHA (Larry W. Herzog)
Supersedes GFAFBI 32-102, February 2001

Certified by: 319 MSG/CC (Col Barbara E. Chine)
Pages: 10
Distribution: F

This instruction establishes policy and procedures for occupants of Military Family Housing (MFH) desiring to construct fences, decks, patios, doghouses, sheds, playhouses, or extensive yard decorations. It also provides guidance for those wishing to install any type of antenna (e.g. TV, Satellite Receivers, Amateur or Citizens Band, omni directional, or long wire).

SUMMARY OF REVISIONS

Changed: **3.10.** to read "Privacy slats, when used, must be:" Added: **3.10.1.** Brown, green, or white in color, Added: **3.10.2.** Maintained to keep a neat appearance. **A bar (|) indicates a change since the last edition.**

1. Occupants of MFH desiring to construct fences, decks, patios, dog houses, sheds, playhouses, or extensive yard decorations must obtain approval in the form of an approved **AF Form 332, Base Civil Engineer (BCE) Work Request**, prior to initiation of construction. The AF Form 332, accompanied by a liability statement, will be initiated at the Self-Help Store, 545 Eielson Ave, and processed through the Housing Management Office, 514 Louisiana, for approval. Fences will conform to the types depicted in **Attachment 1.**

2. All fences:

- 2.1. Will be in the backyard (with the exception of snow fences).
- 2.2. Will have a minimum of one securable gate at least three feet wide. In some cases, two gates may be needed.
- 2.3. Will not cross common use sidewalks.
- 2.4. Will be 48" for snow fences or up to a maximum of 72" high for other fencing.
- 2.5. Will not be attached to the quarters, existing yard dividers, or any government property. **EXCEPTION:** The Housing Management Office may approve variations.

2.6. Will not extend more than 50' from the rear of the building (50' from sidewalks where sidewalks exist behind units) and will not be wider than the width of the building, excluding the garage (except for duplexes with attached garages).

2.7. The area to be enclosed must be approved by the Housing Management Office.

3. Chain link fences:

3.1. Posts will be set at least 24" into the ground; concrete may be used.

3.2. Posts will be spaced a minimum of 6' and a maximum of 10' apart.

3.3. A top rail must be used on all chain link fences.

3.4. Corner and gateposts must be larger than intermediate posts, a minimum of 2.5" outside diameter.

3.5. Chain link fabric must be no lighter than 12 gauge (the larger the number, the smaller the wire).

3.6. All posts must have end caps installed. End caps must not be pointed.

3.7. The sharp points at the top of the chain link fencing must be removed by placing the knuckled selvage edge up and sharp points down. (See [Attachment 2](#).)

3.8. All fence fabric must be pulled tight.

3.9. No colored chain link fabric.

3.10. Privacy slats, when used, must be:

3.10.1. Brown, green, or white in color.

3.10.2. Maintained to keep a neat appearance.

4. Wood fences:

4.1. Will be solid-stained brown, redwood, or painted white.

4.2. Will be up to a maximum of 72". The tops of the vertical boards will be cut flat.

4.3. All posts will be 4" x 4" and will be set at least 24" into the ground. Posts will be spaced a minimum of 72" and a maximum of 96" apart. Horizontal rails for the vertical fencing will be 2" x 4" laid on end. The 4" x 4" posts can be notched so rails or metal hangers can be used. The bottom rail will be 15" up from the ground and the top rail will be 4" down from the top of the post. Vertical face boards will be made of 1" x 6" stock only. The top of boards will be placed even with the top of the post. Vertical face boards must be placed evenly, a maximum spacing of 6" apart and a minimum of 5" apart (a piece of 1" x 6" stock can be used as a spacing guide and will position the boards approximately 5.5" apart). Vertical face boards must be placed in an alternating pattern on both sides of the horizontal rail. (See [Attachment 1](#), [Attachment 2](#), or [Attachment 3](#).)

5. Wood privacy fence sections:

5.1. Will be solid-stained brown, redwood, or painted white. Green-treated wood must be stained brown.

5.2. Will be 72" high only. The tops of the vertical boards will be cut flat.

5.3. All posts will be 4" x 4" and will be set at least 24" into the ground. Posts will be on 72" centers. Horizontal rails for the vertical fencing will be 2" x 4" laid on end. The 4" x 4" posts can be notched so rails or metal hangers can be used. The bottom rail will be 15" up from the ground and the top rail will be 4" down from the top of the post. Vertical face boards will be made of 1" x 6" stock only. The top of boards will be placed even with the top of the posts. Vertical face boards must be placed evenly, a maximum spacing of 6" apart and a minimum of 5" apart (a piece of 1" x 6" stock can be used as a spacing guide and will position the boards approximately 5.5" apart). Vertical face boards must be placed in an alternating pattern on both sides of the horizontal rail. (See top view of privacy fence sections sketch, [Attachment 2](#).)

5.4. Shapes will be limited to L-shape. (See privacy fence section sketch for allowed size shape, [Attachment 3](#).)

6. Snow fences:

6.1. Will only be installed due to extreme drifting.

6.2. Will be 48" high only.

6.3. Will be black, brown, or subdued green.

6.4. Will only be attached to steel T-type posts.

6.5. Will not deter performance of other snow fences installed by 319 CES.

6.6. If preferred placement is in another family housing occupant's yard for optimum effectiveness, written approval from the neighbor must be included with the fence request.

7. Small decorative yard/flowerbed fences:

7.1. May be placed along sidewalks and around flowerbeds.

7.2. Must be kept neat in appearance.

7.3. Cannot be a safety hazard.

7.4. Three-foot maximum height is allowed.

7.5. If built of wood, must be solid-stained brown, redwood, or painted white.

7.6. Cannot be placed along common use driveways.

7.7. Must be removed when leaving unless accepted by incoming military personnel.

8. Yard decorations/landscape items:

8.1. May be placed in the yard, along sidewalks, around flowerbeds, trees, shrubs, and attached to, or part of, a deck.

8.2. Must be kept neat in appearance.

8.3. Cannot be a safety hazard.

8.4. If made of wood, must be solid-stained brown, redwood, or painted white.

8.5. Cannot be attached to any government structure.

8.6. Cannot be placed along common use driveways.

8.7. Examples: Free-standing poles, posts for various items, landscaping timbers, rocks, bricks, lattice work, etc.

9. Decks/Patios:

9.1. Wood decks must be solid-stained brown, redwood, or painted white. Green-treated wood must be stained brown. A 24" clearance must be provided around all gas regulators/lines to allow for emergency service.

9.2. Deck and patio size and location must be approved on an AF Form 332, BCE Work Request, prior to installation. Ground area under and around deck/patio must be returned to original condition when deck/patio is removed, or prior to occupants PCS or relocation. Deck/patio cannot be placed over window-well cover. Please see [15.1](#) for any exceptions.

10. Dog pens:

10.1. Must be kept within occupant's back yard.

10.2. Only chain link fencing can be used.

10.3. Must be moveable and no larger than 12' x 12'.

10.4. Ground area must be returned to original condition.

11. Doghouses:

11.1. Must be constructed of wood, a flat-sloped roof is preferred, or the pre-made polyurethane igloo type.

11.2. Must be no larger than 4' x 4' x 3' high.

11.3. Must be solid stained-brown, redwood, painted white, or the same color as the quarters.

11.4. Must be movable.

11.5. Must be kept within occupant's back yard limits.

11.6. Ground area under and around doghouse must be returned to original condition when doghouse is moved, removed, or prior to occupant PCS or relocation.

12. Sheds/Playhouses (not to include pre-fabricated play equipment i.e., Little Tykes):

12.1. Must be constructed of wood or factory fabricated metal.

12.2. Must be no larger than 10' x 10' x 8' high.

12.3. Must be kept within occupant's back yard limits.

12.4. Must be solid-stained brown, redwood, painted white, be the same color as the quarters, or factory finished to complement the military housing color scheme.

12.5. All sheds/playhouses must be in the backyard and secured by ground anchors, 1 per corner.

12.6. Ground area under shed/playhouse must be returned to original condition when the shed/playhouse is moved or removed.

13. Fences, yard decorations, decks, patios, doghouses, sheds, and playhouses:

13.1. At all times, will be maintained in a neat, attractive, and safe manner. Any item that is not maintained shall be repaired or removed within 30 days of notification.

14. Playsets/Swing sets: Must be kept within occupant's back yard limits and cannot be attached to trees.**15. Privately owned fences, yard decorations, decks, patios, doghouses, sheds, and playhouses:**

15.1. Privately owned items will be removed prior to termination of quarters. Exceptions to this will be made if they meet existing government standards, provided the new housing occupant signs a waiver for the requirement, and thus assumes responsibility for maintaining the privately owned items and for removing it/them when terminating the quarters, or the items are accepted by the government. Fences not meeting existing government standards cannot be left. They must be removed upon termination. Chain link/wood fences in good condition, meeting existing government standards, may be donated to the government at the discretion of the government.

15.2. Any exceptions to the requirements of this supplement must be made in writing prior to the purchase and/or installation of the item. Examples: fences, decks, patios, doghouses, and sheds, yard decorations, playhouses/equipment, etc.

16. Satellite Receiver Installation:

16.1. Dish size must not exceed 24" in diameter.

16.2. Receiver must be installed in back yard with a maximum distance from any home of 50'.

16.3. Will not be attached to the quarters, existing yard dividers, or any government property. EXCEPTION: The Housing Management Office may approve variations.

16.4. Receiver must be supported by a single pipe, a minimum of 1-1/4" inside diameter. Schedule 40 galvanized steel pipe (1-1/2" measured outside diameter) or a 4" x 4" wooden post (treated or cedar) set a minimum of 36" deep in an 8" diameter hole with the pipe encased in concrete. (See [Attachment 4](#)) The housing occupant must remove pipe and concrete and ensure the yard is repaired when the receiver is removed. NOTE: If a concrete base/pad is used, it must be 3' x 3' x 4". The central antenna mast must have a 3 legged support/brace attached to the concrete pad and antenna mast. This should only be used temporarily.

16.5. A grounding rod 8" long with #10 copper ground conductor must be attached to the receiver's chassis ground connection. Receiver cable to the house shall be installed a minimum of 2" underground. Entrance of wire into the housing unit must be through the house sill plate. The sill plate must be repaired when the wire is removed. Any other methods must be pre-approved by the Housing Management Office.

16.6. The receiver must be approved on an AF Form 332 prior to installation. The occupant will attach to the AF Form 332, a drawing of the proposed location, and any rules or directives that the antenna manufacturer may have. The satellite dish must be installed within 30 days from approval date.

16.7. The occupant/installer will assume all responsibility for the installation, operation, and removal of the antenna.

16.8. The occupant will assume all responsibility for potential damage.

17. Citizens Band Antenna/TV Antenna/Communication Station Antenna Installation:

17.1. The antenna supporting structure will extend from the ground up, using a minimum size of 1-1/4" rigid steel pipe or conduit. Support hardware can be attached to the fascia on the rear of the quarters only. When the occupant vacates the quarters, all hardware must be removed and the site returned to original condition. Other types of supporting structures must be approved on an individual basis.

17.2. The antenna supporting structure will be grounded at its base with a copper-clad steel rod, 1/2" in diameter by 8' long or longer, driven into the ground to a point 3" below the surface. A No. 6 American Wire Gauge (AWG), bare soft-drawn copper wire will be attached to the ground rod and antenna supporting structure with appropriate rod/pipe clamps.

17.3. Coaxial cable entry must be made through the sill plate or by removing a basement window and temporarily replacing it with a framework or interior/exterior plywood inserts cut to fit within the removed window space. Insulation must be provided between the exterior and interior plywood inserts. If the home doesn't have a basement, it will be necessary to enter from under the home's crawl space or through a sill plate.

17.4. Each coaxial cable between the antenna and the communications equipment will have a lightning arrester in line and ground wire (no smaller than #10 AWG) connected to the ground rod. The lightning arrester must be installed at the service entrance (sill plate, basement window, etc.). This is necessary for maximum personal, facility, and system protection. Install an 8' copper ground rod at this point. Check for buried utilities before ground rod installation.

17.5. The highest point of an antenna and its supporting structure will not exceed 25' above the highest point of the facility, or a total of 50' above the ground.

17.6. Antennas will not be installed within 50' in any direction of an electrical power line.

17.7. To prevent loss of heat and possible weather damage, cables will not be run between the window and sill plate or door openings except as noted in paragraph 17.3.

17.8. The housing occupant assumes all responsibility for any potential damage.

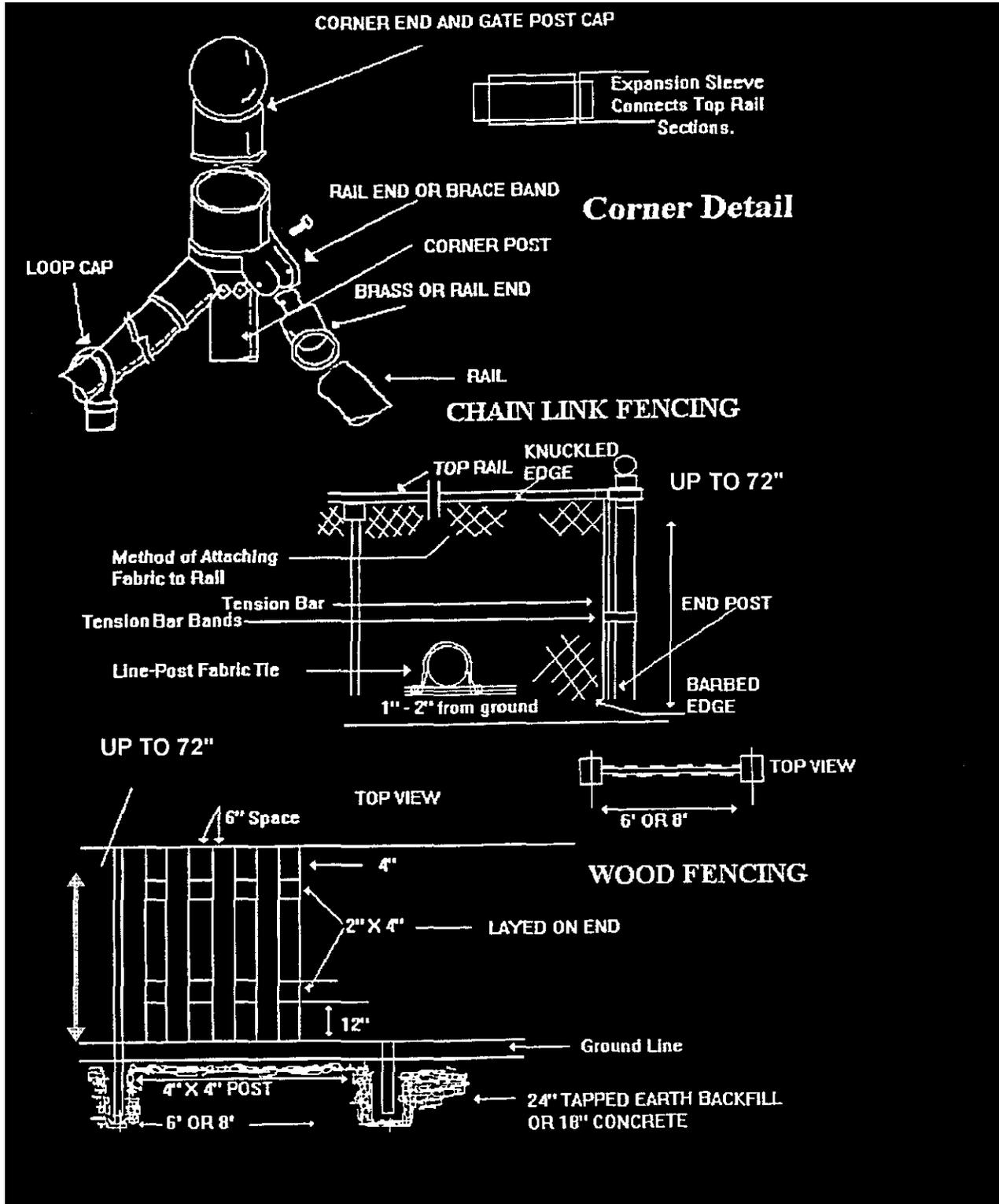
17.8.1. Any antenna must be approved on an AF Form 332 before installation. Attach a drawing of the proposed location. Antenna must be installed within 30 days after approval.

17.9. It is the responsibility of the requester to comply with Federal Communications Commission regulations/directives. **NOTE: If the communications station, television antenna, and/or satellite receiver owner is notified by the 319 MSG/CC of possible electrical system interference to government equipment or privately owned equipment, the owner/operator must immediately terminate its operation and take action to resolve. The equipment will not be reconnected until the 319th Communications Squadron confirms that the suspected equipment is not the cause of the interference.**

MARK F. RAMSAY, Colonel, USAF
Commander, 319th Air Refueling Wing

Attachment 1

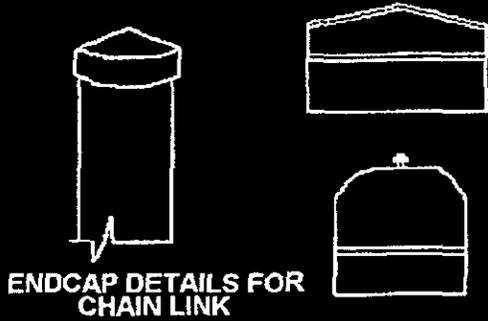
TYPE OF FENCE



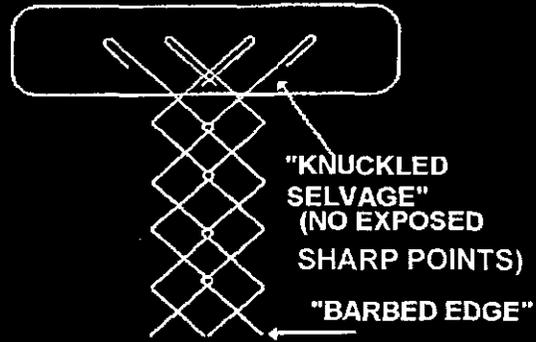
Attachment 2

SHARP POINTS

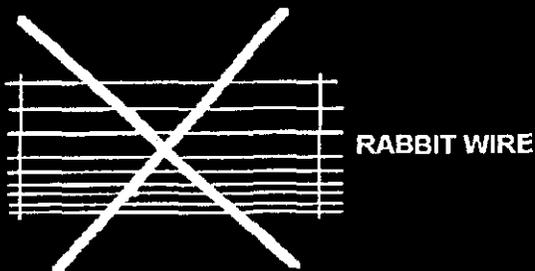
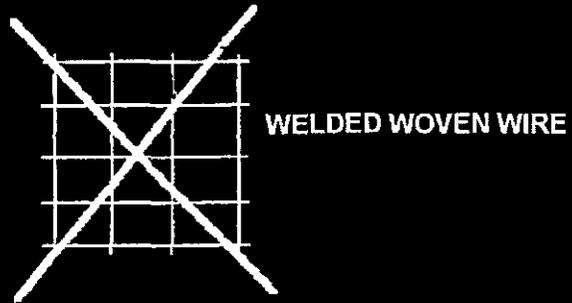
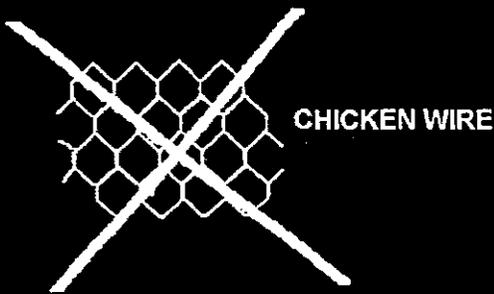
NO SHARP POINTS ALLOWED ON ENDCAPS



TOP OF FENCE

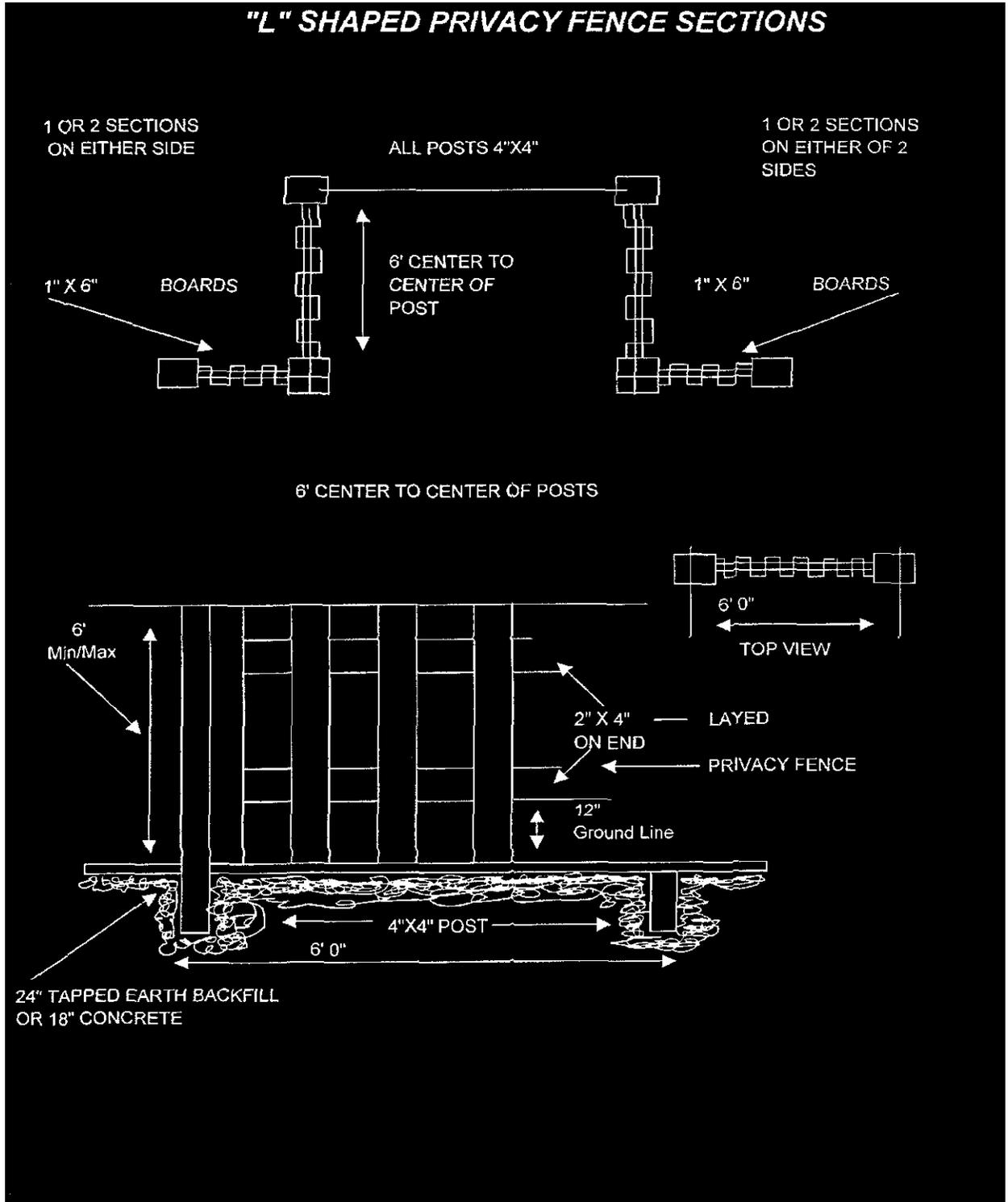


THESE TYPES OF METAL FABRIC ARE NOT ALLOWED



Attachment 3

"L" SHAPED PRIVACY FENCE



Attachment 4

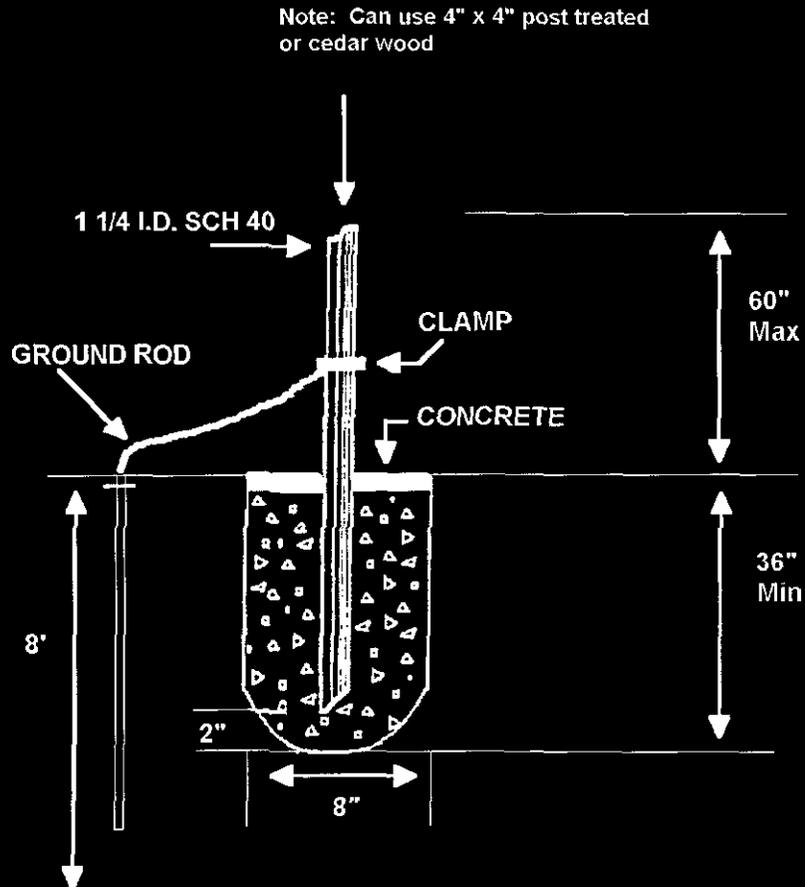
POLE MOUNT

Material List

- 1 each 1 1/4" ID Schedule 40 galvanized steel pipe (1-1/2 measured OD)
- 3 bags quick setting concrete
- 1 each 1-1/2" ground clamp
- 1 each ground rod
- 1 each ground rod clamp
- Ground conductor (No. 10 cooper or No. 8 aluminum)
- Wire ties

Tool List

- Hole digging tools
- Hammer
- Wheelbarrow
- Bubble level or plumb line
- Assorted box of open end wrench
- Screwdriver
- Pencil



Pole Mount