

## POLICY ON THE INSTALLATION AND OPERATION OF DIRECWAY TWO-WAY SATELLITE EARTH STATIONS

OCTOBER 30, 2002

### GENERAL APPLICABILITY

These requirements apply to the installation of all earth stations using DIRECWAY service, including Permanent-Mount and Temporary-Fixed earth stations. DIRECWAY Earth Stations are not designed or authorized for maritime or other boat- or ship-based installations or use.

The FCC has imposed a series of conditions on Hughes Network Systems (HNS) when installing, deploying, and operating DIRECWAY earth stations. These conditions have been applied to the DIRECWAY earth stations so as to protect children and adults from possible harm due to radiation from radio frequency transmissions.

HNS has established a corresponding set of requirements for the installation, deployment and operation of these earth stations. The HNS requirements are mandatory for all installations made within the Continental United States as well as Hawaii, Alaska, Puerto Rico, the U.S. Virgin Islands and other U.S. territories.

1. All DIRECWAY Earth Station Installers must be HNS-Certified, and must have expressly acknowledged the HNS requirements for DIRECWAY installations -- for both Permanent-Mount and Temporary-Fixed earth stations.
2. "Installation" is the physical mounting and wiring of a DIRECWAY Two-Way Satellite Earth Station (including on a stationary vehicle or other stationary site) in order to prepare for correct operation. The installation and removal of a DIRECWAY earth station must be completed only by an HNS-Certified Installer.
3. "Deployment" means the raising, pointing and orienting of the earth station to the communicating satellite, at initial installation for Permanent-Mount antennas, and for Temporary-Fixed antennas, every time such an antenna is raised from a stowed position for use.
4. Installers must ensure that DIRECWAY earth stations are only installed in locations that are not readily accessible to children and in a manner that prevents human exposure to potential harmful radiation hazards.

## PERMANENT-MOUNT TWO-WAY INSTALLATIONS

For purposes of this policy statement, a “Permanent-Mount” earth station is defined as an earth station that is not to be relocated and that is permanently mounted on a pole, building, deck post, or other permanent fixture in accordance with current HNS Installation Guidelines. Full specifications are found in the HNS Satellite Return Antenna Installation Guide available in electronic format on the DIRECWAY Program CD.

***These requirements apply to the installation of all Permanent-Mount Two-Way 0.74 meter and 0.98 meter earth stations using the DIRECWAY service.***

1. For pole-mounted installations, the antenna must be installed on a metal pole that is between 9-15 feet in length. At least 3 feet of the pole must be set in concrete in at least an eight inch diameter hole, 36 inches deep.
2. For mounting on a wooden deck post, the antenna must be installed on a secured, 6-inch x 6-inch wood deck support post that can be no more than 8 feet tall. The antenna mount base must be installed a minimum of 5 feet above the base of the post.
3. For mounting on exterior building walls, the antenna mount base must be a minimum of 5 feet from the base of the building and at least 12 inches from any discontinuous surface, such as a window, door, or edge of a wall.
4. The Permanent-Mount DIRECWAY earth station may also be installed on a permissible type of wood-framed roof.

***These requirements apply to the installation of all Permanent-Mount Two-Way 1.0 meter, 1.2 meter and 1.8 meter earth stations using the DIRECWAY service for enterprise applications.***

1. These antennas must be surrounded by a physical barrier or fence at least 2 meters tall with a locked gate, to prevent human exposure to excess radiofrequency radiation. A “physical barrier” is considered to include the roof of a building or other structure higher than 6 feet, if access to that roof or structure is locked or otherwise inaccessible to the general public.
2. Warning signs must be posted informing the public to keep outside the physical barrier or the locked area.

## TEMPORARY-FIXED TWO-WAY INSTALLATIONS

A “Temporary-Fixed” earth station is, according to the FCC rules, an earth station that changes its location (coordinates) any time during a six-month period. For purposes of this policy statement, all HNS earth stations using the DIRECWAY service, that are mounted on a vehicle (for example, an emergency response vehicle or a recreational vehicle), or otherwise used as a transportable earth station for stationary operation, are considered Temporary-Fixed Earth Stations.

The installation policy for a Temporary-Fixed earth station that is not vehicle mounted is the same as that for Permanent-Mount installations.

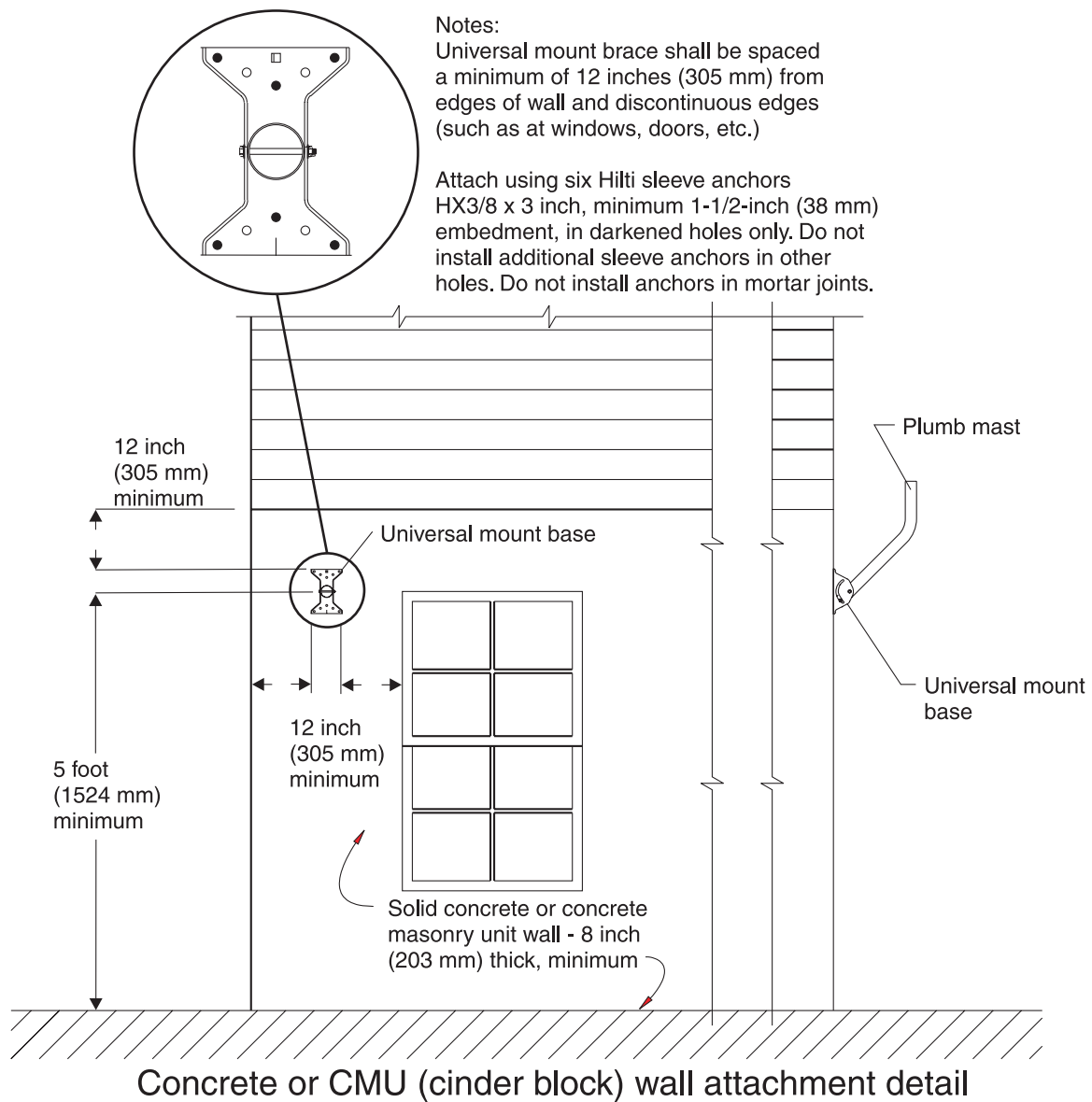
**These requirements apply to the installation of all Temporary-Fixed Two-Way 0.74 meter, 0.98 meter and 1.2 meter earth stations using the DIRECWAY service and that are vehicle-mounted.**

1. For large vehicles with roof mounts, the height of the bottom lip of the earth station when fully deployed must be at least 6 feet above the ground at all times, or 6 feet above a surrounding surface which a person may easily access.
2. If a roof access ladder or any other means of access to the roof exists on the vehicle, then the ladder or access must be blocked by a suitable rope or other barrier while the earth station is deployed or in operation. The installer must provide this rope or barrier directly to the end user at the time of installation and advise the user to use it at all times when the earth station is deployed or in operation. Warning signs must also be provided by the installer to the end user to be posted on the rope or other barrier warning all persons not to attempt to access the roof of the vehicle while the earth station is deployed or in operation.
3. Warning signs must be posted at prominent locations on and around the Temporary-Fixed DIRECWAY earth station informing all persons of the danger of potential harmful radiation from the earth station while it is deployed or in operation.
4. After installation by an HNS-Certified Installer, a Temporary-Fixed DIRECWAY earth station may be deployed by an End User using HNS-Certified deployment software.
5. A Temporary-Fixed DIRECWAY earth station may only be operated when the earth station and, if applicable, the vehicle are stationary.
6. Temporary-Fixed DIRECWAY earth stations must not be installed, deployed, or used on any mounting where the lower lip of the antenna is less than 6 feet from the ground.

#### RESPONSIBILITIES AND LIABILITIES OF INSTALLERS

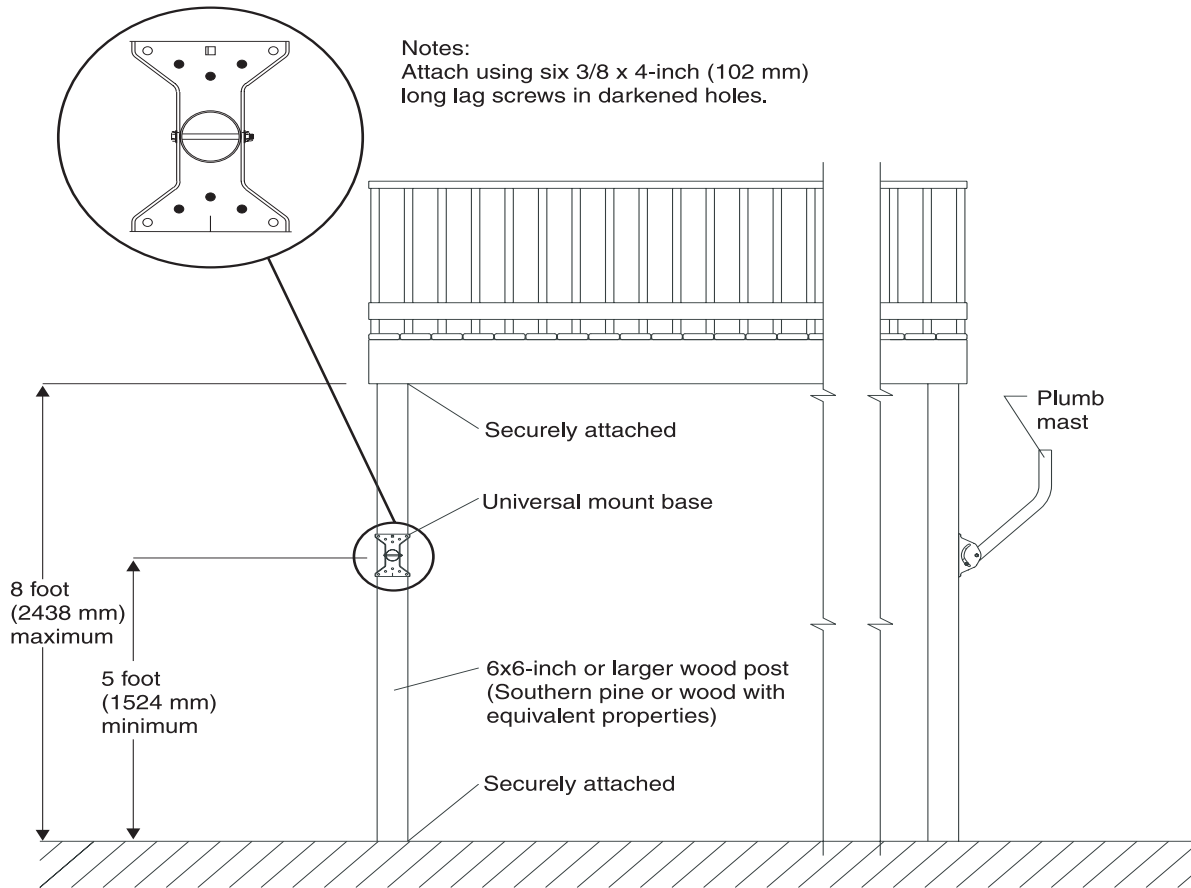
1. Installers will be directly liable for any and all damages, liabilities, costs and expenses (including attorneys' fees), whether direct or indirect, foreseeable or unforeseeable, incurred by HNS and/or any of its affiliates, and/or any of their respective officers, directors, employees and/or agents arising from, or related to, any failure to comply with these requirements or any other HNS rules and/or guidelines that may be established from time to time. This includes, but is not limited to, matters arising from, or attributable to, improper installation or the failure to provide required information to the End User.
2. HNS reserves the rights to immediately suspend without liability or prior notice the operation of any earth station in order to address any actual or perceived deviation from HNS installation or operational requirements of which HNS becomes aware or suspects, until the deviation is corrected to HNS' sole satisfaction.





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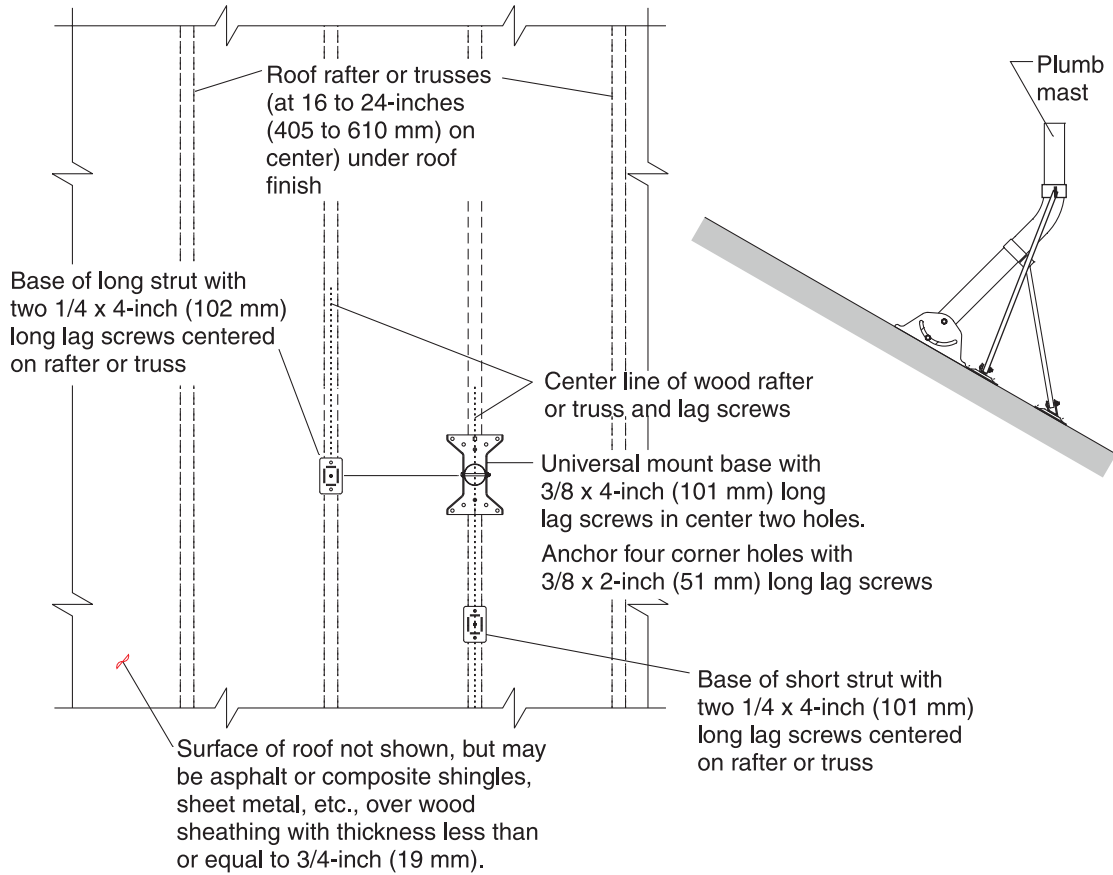
Compliant Installation of Two-way DIRECWAY Permanent Wall Mount Antenna



6x6 wood deck post attachment detail

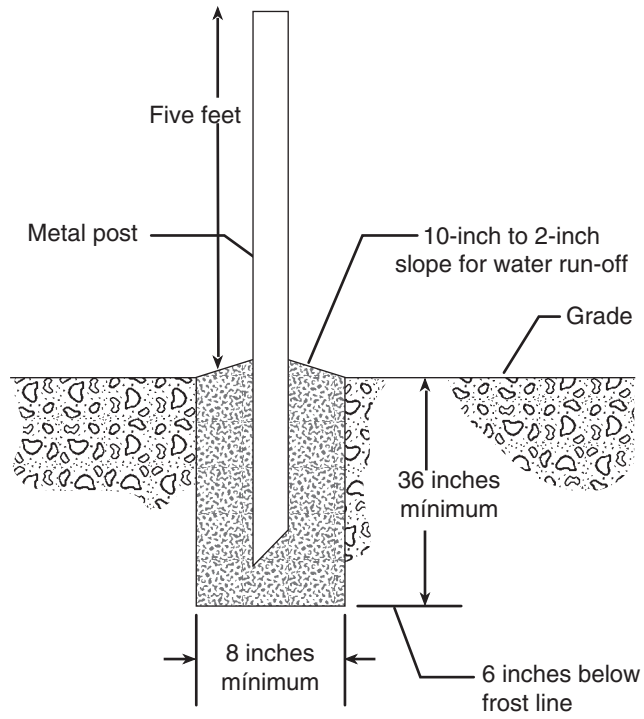
Compliant Installation of Two-way DIRECWAY Permanent Deck Mount Antenna

Notes:  
 Success of attachment relies  
 on installation of all lag  
 screws in center of wood  
 wall studs ( $\pm 1/16$  inch or 1.6 mm).



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### Compliant Installation of Two-way DIRECWAY Permanent Roof Mount Antenna



Compliant Installation for Two-way DIRECWAY Permanent Pole Mount Antenna



Compliant Installation for Two-Way Temporary-Fixed DIRECWAY Antenna



Illegal/Unsafe Installation of Two-Way Temporary-Fixed DIRECWAY Antenna