U.S. Department of Justice
CTAS Purpose Area #4—Bureau of Justice Assistance (BJA)

Tribal Victim Services Set-Aside—Office for Victims of Crime (OVC)

Permanent Modular Facilities Minimum Construction Requirements and Recommendations (20- to 30-year facility life)

BJA and OVC Permanent Foundation Requirements:

The following Permanent Modular/Manufactured Home Facility Requirements shall supersede HUD and Tribe preferred codes and requirements:

1. Soils testing and geotechnical foundation recommendations are required.
2. A Professional Licensed Structural Engineer shall design all Permanent Foundation Systems.
3. A Permanent Foundation System shall use reinforced concrete piers and/or crawl space structural steel column supports and shall be welded/bolted to both the concrete pier(s) and Modular steel frame(s).
4. The Modular structure and foundation shall be designed to meet specific site location and code for dead/live load, wind, and seismic conditions.
5. **As a minimum, the modular/manufactured structure shall be permanently supported on reinforced concrete or steel piers to a depth of one foot below local frost depth.** Piers shall be located under the modular steel frames, under the modular perimeter and marriage wall(s) floor framing.
6. When a crawl space is not required or in areas where winter frost is not a problem, an acceptable and alternative concrete foundation system such as a slab on grade with thickened haunches would meet BJA requirements. The thickened haunches should be one foot below local frost depth at modular perimeter and marriage walls. Foundation design should be coordinated with the modular manufacturer's utility locations.
7. At a minimum the perimeter of the modular crawl space (24-inch clear depth) shall be skirted with a one foot wide, four-inch-deep perimeter concrete footing, treated framing lumber, and skirting to match modular siding (if possible), with Resistance to Heat Flow (R) R19 insulation board or foam board. If winter conditions are severe, additional water and sewer piping may require electrical heat tracing (tape).
8. A "permanent" front entrance shall be constructed of concrete steps, a concrete landing, and a concrete ramp. The front entrance to a permanent Justice Facility shall be Americans with Disabilities Act (ADA) compliant.
9. Steel or aluminum steps, landings and ramps as allowed by ADA code can be installed at other exterior doors.
10. **Concrete block or cinder block shall not be used as a "permanent" foundation support structure for a Modular/Manufactured Home facility.**

Building Codes:

"Modular" Building Codes:

The Tribe shall decide which code they are required or prefer to follow: International Building Code (IBC), state, county, or local/city code.

"Manufactured Home" Building Codes:

Manufactured Homes shall follow HUD Guidelines and the following link to the Code of Federal Regulations Title 24 Part 3280: https://www.ecfr.gov/current/title-24/subtitle-B/chapter-XX/part-3280.

In addition to the above BJA Grant Foundation "Requirements" items 1-10, the following United States Department of Housing and Urban Development (HUD) guidebook link for HUD "Permanent Concrete Foundations for Manufactured Homes is an **acceptable HUD Code** to follow for "permanent" DOJ-BJA grant-funded facilities:

Except: No use of non-grouted and unreinforced concrete block piers or any use of cinder block are allowed.
https://www.hud.gov/program_offices/administration/hudclips/guidebooks/4930.3G.

BJA Modular and Manufactured Homes Structure and Site Recommendations (If the Grant Budget allows)

Foundations

1. Concrete perimeter foundation stem wall with R-19 insulation board or foam.
2. Embed 2"x 4" treated wood nailers in the exterior surface of the perimeter concrete foundation stem wall to allow installation of cement fiber board siding to match modular siding.

Floor structure

1. 2"x 10" @ 16" on center (OC) floor joists
2. Glued ¾" sub floor and ¼" underlayment board for 1" two-layer subfloor
3. Optional two steel channels or beams for modular or trailer transporting

Exterior wall structure

1. Exterior 2"x 6" studs @ 16" OC with cement fiber board siding or equal

Interior wall structure

1. 2"x 4" studs @ 16" OC
2. Sheetrock taped and textured and two coats of paint

Roofing system

1. A Professional Licensed Structural Engineer shall design the roof structure and hold down requirements for specific project site location code considering dead/live load, wind, and seismic conditions
2. Minimum ¼" sloped trussed 24" OC roof
3. ½" roof sheathing, tar paper or equal, nailed asphalt three-tab shingle OR membrane, modified bitumen, or standing seam metal roof

Energy efficiency

1. Synthetic high-density polyethylene fiber synthetic sheeting air and water barrier or equal, batt or blow-in insulation.
2. Minimum, R-38 ceiling, R-19 exterior walls and R-19 floors (or all higher if regional energy code requires.
3. Energy efficient Light-Emitting Diode (LED) lighting fixtures.

Sound proofing (if required)

1. For justice court, police, or social programs facilities where sound proofing is critical, a Professional Licensed Architect/Engineer (A/E) should review the owners' facility program and provide design for sound proofing with a minimum Sound Transmission Class (STC) rating of 50 to 60 or stronger
2. Sound Proofing design options that should be considered include the following:
    - Staggered wall studs
    - Wall framing thickness
    - Insulation thickness and R rating used on walls and ceilings
    - Mass loaded vinyl wrap over the insulation batts
    - Resilient channels cross ways to studs
    - High density, soundproof sheetrock with minimum STC rating
    - No sheetrock nails/screws into the wood studs
    - Soundproofing permanent adhesive between double thickness sheetrock
    - Sealant for all sheetrock seams
    - Sound proofing rooms shall not have louvered or plenum Heating Ventilation Air Conditioning (HVAC) air transfer
    - Sound proofing rooms shall have HVAC supply and return insulated ducts with sound attenuator baffles
    - Soundproof rooms shall have door jamb seals and actuated door bottom seal

Fire/smoke detection, alarm, and suppression

1. Fire/smoke detection and alarm system capable of remotely alarming offsite
2. Fire extinguisher(s) and cabinet(s)
3. Wet or dry fire suppression if required by code
4. 24/7 sleeping reintegration facilities or clinics: A Professional Licensed A/E should review the Owners facility program and make recommendation of applicable building code occupancy rating and if a fire sprinkler suppression system is required. If fire sprinkler system is required, A/E shall review the project site water system flow rate and pressure to assess if the project water supply is adequate.