

**SECTION 260528 - SUPPORTING AND VIBRATION CONTROL DEVICES**

- 1.0 Supporting and vibration control devices/systems shall be designed and constructed to support the weight of the equipment, raceways, etc. The devices/systems shall be in accordance with applicable portions of NFPA70, ASTM, UL, and NEMA. The design and/or specifications shall document the requirements for supporting and vibration control devices.
- 2.0 General:
- A. All supporting devices shall be used for the specific purpose for which they were manufactured.
- 3.0 Coatings:
- A. Coating: Supports, support hardware, and fasteners shall be protected with zinc coating or with treatment of equivalent corrosion resistance using University Engineering Department approved alternative treatment, finish, or inherent material characteristic. Products for outdoor use shall be hot-dip galvanized after fabrication.
- 4.0 Manufactured Supporting Devices:
- A. Raceway Supports: Clevis hangers, riser clamps, conduit straps, threaded C-clamps with retainers, ceiling trapeze hangers, wall brackets, and spring steel clamps.
- B. Powder-Driven Threaded Studs: Powder – Driven devices shall not be used unless specifically approved by the University Engineering Department.
- 5.0 Supports:
- A. Strength of each support shall be adequate to carry present and future load multiplied by a safety factor of at least four. Where this determination results in a safety allowance of less than 200 lbs., provide additional strength until there is a minimum of 200 lbs. safety allowance in the strength of each support.
- B. Walls of light weight construction (including all stud/drywall type construction) shall be reinforced with surface mounted continuous steel support channels (Unistrut) before hanging electrical equipment.
- 6.0 Vibration Isolators:
- A. Double deflection, resilient type
1. Use for floor mounted equipment and all transformers
  2. Oil/Water resistant neoprene material
  3. Ribbed faces for non-bolted applications
  4. Bolt holes for bolted applications
- B. Spring isolators – freestanding, laterally stable, open type
1. Use for generators.
  2. Use internally, between base and core and coil assembly for all substation transformers
  3. Sized to support 200% of rated load