

# CITY OF MILPITAS

Building & Safety Department  
455 E. Calaveras Blvd.  
Milpitas, CA 95035  
408-586-3240  
[www.ci.milpitas.ca.gov](http://www.ci.milpitas.ca.gov)



## RESIDENTIAL ROUGH & FINAL ELECTRICAL INSPECTION CHECKLIST

- Protect NM cable from the studs edge no less than 1 ¼": from surface or use nail plate
- Secure NM cable within 12" from metal box and 8" from plastic box min 1/4" insulation into box
- No more than 2 cables bundled through framing if sealed must be de-rated
- NM cable smaller than 8-3 have to be protected under floor joist smaller wire must have running boards or through joist
- Protect wire within 6' of access hole
- Equipment requires outlet and light switch at entrance
- Minimum 2 circuit for small appliance at kitchen, Disposal, and Dishwasher separate circuit. Use 2'-4' rule for counters
- If using Duplex receptacle for Dishwasher/Disposal circuits than a handle tie or two pole breaker needed for 12-3 circuit
- Laundry min 1-20 amp outlet required
- Bath minimum 1-20 amp for all outlets in bath or all GFCI receptacles in bathrooms tied together by themselves
- Accessible receptacles at front and rear max 6 ½' above grade
- Check all grounding and bonding (UFER, water bonding, and gas use table 250.66 for water and 250.122 for gas bond. ½" rebar or #4 bare copper in footing for GEC size use 250.66 for size)
- Service panel complete. Check clearance 30 min wide by 36" deep. Makeup with brand name breakers installed and made tight. Identify branch circuit max height for breakers is 6'7".
- No panel boards in bathrooms and closets
- Antioxidant installed on all aluminum wires
- Check wire size minimum 4AWG CU or 2AWG AL 2007 CEC310.15B6
- Check insulation for damage and type
- Use proper bending ratios not more than 5 times the diameter of cable
- Proper smoke alarm location Bedroom, outside bedroom, Upstairs and downstairs
- All outlets in bedroom to be Arc Fault protected Receptacles, Smoke detector, and Lights
- Use proper size wire for amperage 12 gauge for 20 amp, and 14 gauge for 15 amp, usually 14 gauge is white, and 12 gauge is yellow
- Check that all recessed can lights in unconditioned space are Air tight and IC rated if in contact with insulation
- Check sub panel for ground, and neutral to be separated only ok to be tied together in main service panel
- Check metal boxes for ground screws, and no metal mud rings with plastic boxes unless bonding jumper installed
- Lighting clearance in closet from shelf surface fixture 12" recessed fixture 12" recessed fixture 6"
- 3 way switch required at stairs 6 or more risers controlled from top and bottom

### Final Electrical

- Panel labeled and clear space in front
- AFCI/GFCI breakers installed
- Test all GFCI outlets and outlets fed by GFCI
- Grounding/ Bonding installed rod or UFER
- All disconnects in place with correct fuse sizes and clearances
- All unused openings closed
- Cover plates installed check for goof rings at granite back splash at kitchen max ¼" back from noncombustible surface to box
- All fire rated penetrations sealed
- Equipment installed listed and/or approved
- Bubble covers in wet locations
- Receptacle within 25ft of equipment
- Light and receptacle in attic access
- Check for lighted address

**Service Change**

- Correct size and type of wire sunlight resistant and wet location
- Clearance over roof, and pool
- Equipment listed for service panel
- Secure riser above panel within 3'
  
- No unsupported couplings above roof
- Service lateral buried proper depth 2007CEC300.5
- Min size mast per utility (typical 1 1/4-2in RMC)
- AFCI breakers installed per COM
- Existing Grounding Electrode in place, or add new
- Bond water and gas
- Label breakers
- Seal unused openings
- Inspect lath if flush mount
- Antioxidant on Aluminum wires
- Breaker size verse wire size
- Busing or connector used for wires in back of service panel
- Only 1 wire per terminal unless listed