Finishes

- Metal Support Assemblies
- Plaster & Gypsum Board
- Ceilings
- Flooring
- Wall Finishes
- Acoustical Treatment
- Paints & Coatings
Metal Support Assemblies

Metal Studs:

- Light gage (25 to 20 for non-load bearing and 18 to 12 for load bearing) cold-formed steel, electrogalvanized to resist corrosion. Available in thicknesses of 1 5/8, 2 2, 3 2, 4, and 6 inches.
- Unit: LF, note type, gage, and width.
Furring

- Used to provide an even base for the wallboard installed on masonry or concrete walls. Cold-rolled steel channels (16 gage, 3/4 to 2 A wide) and wood strips (1 x 2 or 2 x 2) are widely used.
- Unit: LF, note type and size.
Suspended Ceiling Systems

- To hide the structural, mechanical, and electrical systems from view, and provide attractive surface. Consist of hangers, main tees (runners) and cross tees.
- Unit: SF, note type (concealed/exposed), shape (tee/z), and grid size (2' x 2'/4' x 4').
Mineral Fiber Tile Applied with Adhesive

Fiberglass Board on Suspended Grid System

Exposed tee grid
Concealed tee spline
Concealed access spline
Exposed 2 grid
Gypsum Wallboard

- Gypsum wallboard (sheetrock) is the most common material for walls and ceilings. It is available in a 4-foot wide and lengths of 6, 8, 10, and 12 feet with thicknesses of 1/4, 1/8, 3/8, 2, and 5/8 inches.
- Unit: SF, note, thickness, number of layers (single-ply/multi-ply), type of fasteners. Remember there are two sides to most walls.
Accessories

- **Nails:** The angularly threaded nails provide more withdrawal resistance, require less penetration, and minimize nailpopping. Nailhead is generally flat or slightly concave.
  - The spacing of nails varies from 6" to 8" on center.
  - Unit: pound, 5 to 7 pounds per msf (1000 sf)
- **Screws:** Drywall screws are replacing nails. Are spaced about 12".
  - Unit: M (one thousand), 1000 per msf (12" spacing and vertical board application).
Accessories Cont.

- **Trim**: to provide maximum protection and neat, finished edges.
  - Unit: LF, note type of material, size, shape, type of finish.
- **Joint Tape and Compounds**: Used with gypsum wallboards to reinforce and conceal the joints between panels and to cover fastener heads.
  - Unit: LF of tape and pound of compound (for 1000 sf of surface area, 380 lf of tape and 5 gallons of ready-mixed compound).

Plaster

- Generally applied by trowel in one or more coats to form a durable wall or ceiling finish material, a backing material for tile, or as fireproofing for structural framing.
- **Portland Cement**: has interior and exterior (with integral color is called stucco) applications. More susceptible to cracking, can't be finished as smooth as gypsum plaster, is less fire resistant than GP.
Gypsum: Is not suitable for exterior uses or interior areas subject to wetting or high humidity conditions. Can be applied over concrete masonry, cement plaster, and gypsum and metal lath.

Unit: SY, note number of coats, thickness of coats, mixes to be used, type of lath required, and on wall or ceiling.
Lath

- Is used as a base for plaster (the plaster is bonded to the lath).
  - Gypsum Plaster Lath: is similar to GB, available in plain, perforated, with aluminum foil backing for thermal insulation, and type X which is fire resistant.
  - Unit: Sheet or 1000 sf, note the type and thickness. Use 6% for waste.
  - Metal Laths: are available in flat diamond mesh, flat rib lath, galvanized woven wire fabric with a hexagonal mesh pattern (called stucco netting or poultry netting), and welded wire fabric lath.
  - Unit: SY, note, type, weight, and finish. Use 6 to 10% waste.
Wood Flooring

- Strip flooring - up to 3 1/4" wide, in various length
- Plank flooring - from 3 1/4" to 8" wide, 25/32" thick, and in various length; tongue and grooved, or square edged; may be installed with nails (concealed), screws, or mastic.
  - Unit: SF (or BF measure), note size, and type of installation. Waste ranges from 15 to 40%.
Wood Flooring Cont.

- Block flooring (parquet floor), sizes range from 6"x6" to 30"x30", 5/16" to 3/4" thick; tongue and grooved, or square edged.
  - Unit: SF, note type of flooring, pattern required, and method of installation. Waste 2 to 5%.

Random Patterns of Parquet Flooring
Resilient Flooring

- Are made of asphalt, vinyl, rubber, or cork.
- Vinyl Composition Tile (VCT) is the most common and is available in a wide range of colors and designs.
  - Tile sizes range from 9"x9" to 12"x12". Sheet sizes are 6 and 12 feet wide.
  - VCT could be placed over concrete (steel troweled) or wood by use of the appropriate adhesive.
  - Unit: SF, note the color, design, thickness, size of tile or sheet, and adhesives. Waste for tile (Fig. 16-9), for sheet can amount to 30 and 40%.
Carpet

- Is attractive, sound softening, clean, and quick in installation.
  - surface material: acrylic, nylon, wool
  - backing: jute, cotton, polyester,
  - connected by weaving, fusion bonding, or knitting
  - available in rolls 9',12', 15', and 18' wide
  - it is installed over sponge rubber or foam pads
  - Unit: SY, note type of face material, face weight (ounce/SY), pile height, density (no. of tufts /in), type of backing material. Waste may be large unless there is sufficient planning.

Carpet Cont.

- The cushion is taken off by SY, with the type of material, design, and weight noted.
- Wall base is taken off by the LF. Heights of 21/2", 4", and 6".
Ceramic Tile

- Is available in exterior or interior grades, glazed or unglazed.
  - May be installed by use of PC mortar, organic adhesives, and epoxy mortars.
  - Unit: SF, note type, size, color, and method of installation. Waste 2 to 5%.
  - The number of trimmers required should be kept separate (more expensive).
  - Accessories if specified should be counted (soap holders, paper holders, grab rails, towel bars, ...).

Painting

- Protects surfaces against moisture, stain, and wear, and provides a pleasant appearance.
  - Transparent - shellac and varnish, to protect natural wood.
  - Primers - to seal the substrate and give the surface a uniform opacity (not transparent)
  - Undercoating - first coat under enamel paint finish coat
  - Finish coats
Painting Cont.

- Solvent paints (oil based) - dry through the solvent vaporization. Develop a tighter film than latex paints and are superior in wet environment.
- Latex paints - consisting of a water suspension or emulsion of latex combined with pigments and additives such as binders and suspended agents. They dry through evaporation of water.
- Enamels are solvent-based paints in which the pigments are more finely ground and the solvent is varnish (a combination of resins and oil)

Painting Cont.

- Enamel has a high gloss and retains the gloss for the extended period.
- Latex paints drip less and are water soluble. Cleaning is easier.
- Type of Application:
  - Spraying-fastest, for large surface 10 to 20% material waste
  - Roller application- next fastest, large surface
  - Brush work
Painting Cont.

- Unit: SF of surface, note number and type of coats, type of application, interior or exterior.
- An average of 5 to 10% of the area is usually calculated as the touch-up required.
- The cost of protection of other finishes, scaffolding, daily cleaning, and compressor in an air spray situation should be considered.

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