

# **SPG Estimating Rules of Thumb**

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# Purpose of this Lunch N' Learn

- Explain how SPG estimates are generated
- Talk about **standard** scope of work items so customers can get an idea of cost prior to requesting a formal estimate from SPG
- Review the assumptions that are typically made → which sometimes lead to change orders when unforeseen conditions are discovered

# Patching and Painting

- Two trades are usually required – Masons and Painters
- Rule of Thumb: \$1.50/SF (square foot) of wall space
- Basis of Design: Sherwin Williams latex paint
- Assumptions:
  - Minimal patching is required (assume about 2 hours)
  - Only spot priming is required (no special primer)
  - Wall to be painted similar color; only 1 coat needed
  - Does not include trim or doors

# Patching and Painting – Calculation

Say your room is 12' x 12', with 9' ceilings and looks like:

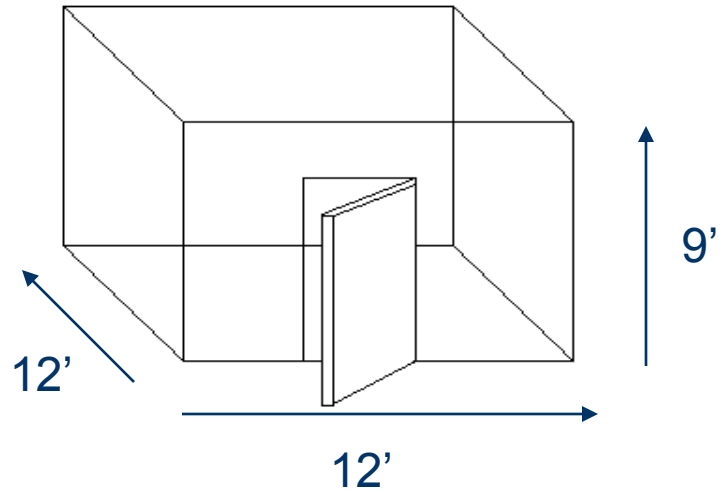


Figure out the SF of your walls:

- Each wall:  $12' \times 9' = 108$  SF
- There are 4 walls →  
 $4 \times 108$  SF = 432 SF

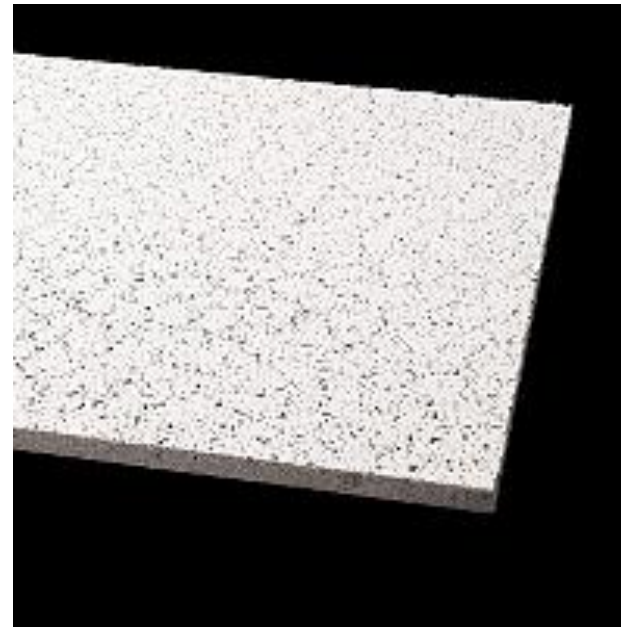
Now, figure out your cost:  $\$1.50/\text{SF} * 432 \text{ SF} = \$648.00$

# Ceiling Tile Replacement

- Carpenters are required for this work
- Rule of Thumb:
  - Material Cost = \$1.25/SF
  - Labor Cost = .125 hrs/SF
- Basis of Design: Armstrong Cortega lay-in tiles, 2' x 4' ceiling tiles, model #769 (University Standard)
- Assumptions:
  - Remove and replace tiles in existing ceiling grid
  - Some cuts will be required to fit in the existing grid
  - No high hat lighting fixtures are installed in existing ceiling, which would require an electrician's help

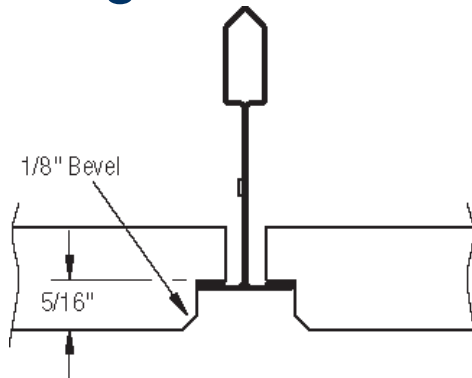
# Ceiling Tiles

University Standard:  
Armstrong Cortega,  
model #769, 2' x 4', in  
15/16" grid



# Ceiling Tiles

Premium ceiling tiles:  
Armstrong Ultima,  
model #1915, 2' x 4', in  
9/16" grid



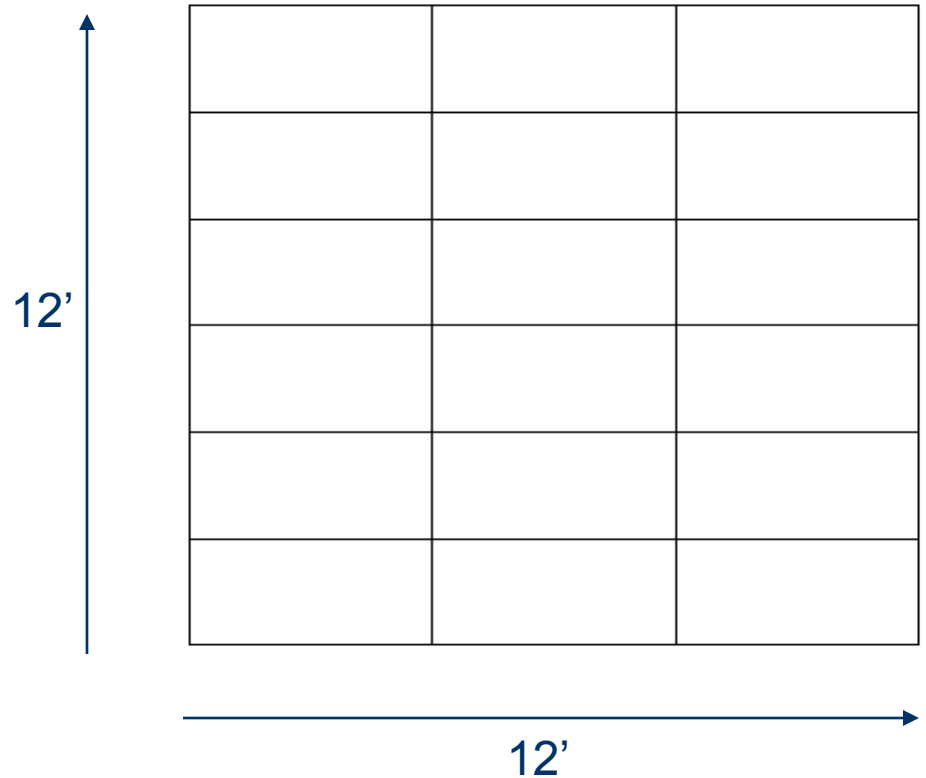
The fancier the ceiling tile, the more the work will cost, due to both increased material cost and increased labor cost

# Ceiling Tile Replacement – Calculation

Take the same room,  
12' x 12', with a  
ceiling that looks  
like:

Figure out the SF of  
the ceiling:

$$12' \times 12' = 144 \text{ SF}$$





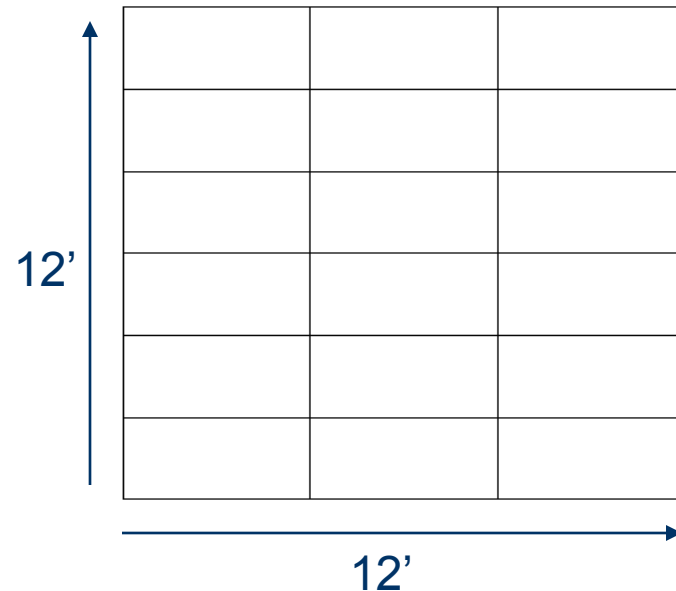
# Ceiling Tile Replacement – Calculation

Figure out your material cost:

$$\begin{aligned} \$1.25/\text{SF} * 144 \text{ SF} = \\ \$180.00 \end{aligned}$$

Figure out your labor cost:

$$\begin{aligned} .125 \text{ hr}/\text{SF} * \$53/\text{hr} * 144 \text{ SF} \\ = \$954.00 \end{aligned}$$



Calculate total cost = material cost + labor cost:

$$\$180.00 + \$954.00 = \$1134.00$$

# Lighting Fixture Replacement

- Electricians are required for this work
- Rule of Thumb:
  - Material Cost = \$100/fixture
  - Labor Cost = 2 hrs/fixture
- Basis of Design: Cooper Lighting, Metalux, lay-in, 2' x 4' fixture, T8 ballast, 3-lamp, with prismatic lens
- Assumptions:
  - Remove and replace lighting fixture at existing circuit location
  - No switching changes are required

# Lighting Fixtures

Standard, 2' x 4' Cooper Metalux Fixture with 3-lamps, T-8 Technology, and prismatic (plastic) lens



# Lighting Fixtures

Premium fixtures, like these, can quickly increase the material cost and sometimes, depending on installation methods, also increase the labor cost.



# Lighting Fixture Replacement - Calculation

In our 12' x 12' room, assume we have two lighting fixtures to replace

Figure out material cost:

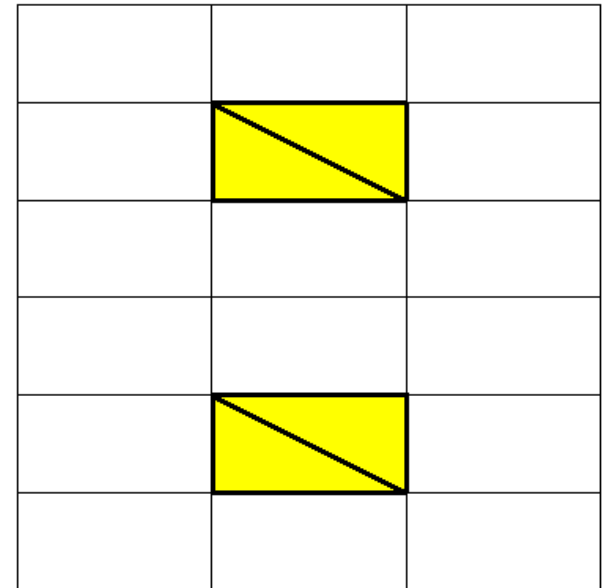
$$2 \text{ fixtures} * \$100/\text{fixture} = \$200$$

Figure out labor cost:

$$2 \text{ fixtures} * 2 \text{ hrs/fixture} * \$53/\text{hr} = \$212$$

Calculate total cost = material cost + labor cost:

$$\$200 + \$212 = \$412$$



# VCT Flooring Installation

- VCT (vinyl composition tile) installation is performed by the Masons
- Rule of Thumb:
  - Material Cost = \$3.50/SF
  - Labor Cost = 0.1 hr/SF
- Basis of Design: Armstrong Standard Excelon Imperial Texture, 12" x 12" tiles
- Assumptions:
  - Installation only, on bare concrete
  - Floors are level and skim coating is not necessary

# VCT Installation - Calculation

In our 12' x 12' room, our floor looks like:

We know  $12' \times 12' = 144 \text{ SF}$

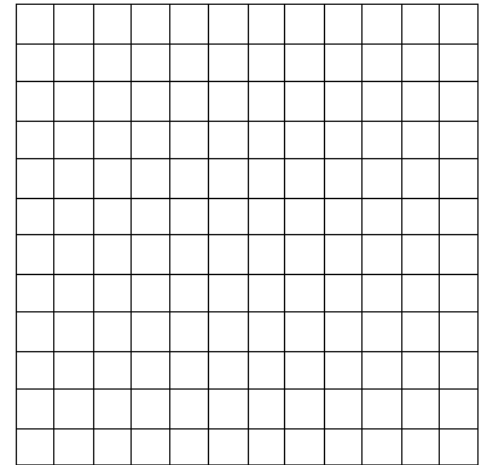
Figure out material cost:

$$\$3.50/\text{SF} * 144 \text{ SF} = \$504.00$$

Figure out labor cost:

$$0.1 \text{ hr/SF} * \$53.00/\text{hr} * 144 \text{ SF} = \$763.00$$

$$\text{Total Cost} = \$504.00 + \$763.00 = \$1277.00$$



# Carpet Installation

- This work is always performed by an outside contractor.
- Rule of Thumb: \$35/SY (square yard)
- Basis of Design: Commercial grade, glue-down, “standard” carpet, like Shaw “Movement”; could be broadloom or carpet tiles.
- Assumptions:
  - Removal of old flooring is not included; Recycling is usually an additional cost as well.
  - No skim coating or other surface preparation is required



# Carpet Installation - Calculation

Find SY from SF by dividing by 9:

$$(144 \text{ SF})/9 = \text{approx } 16 \text{ SY}$$

Figure out total cost:

$$16 \text{ SY} * \$35/\text{SY} = \$560.00$$

# Cove Base Installation

- Work is performed either by Masons or outside contractors, depending on who completed the new flooring installation
- Rule of Thumb:
  - Material Cost = \$1/LF (linear foot)
  - Labor Cost = 0.1 hr/LF
- Basis of Design: Johnsonite vinyl or rubber cove base with toe
- Assumptions:
  - Material is in stock and is a standard color; otherwise, material cost would increase due to special order and requirement for minimum quantities to be purchased.



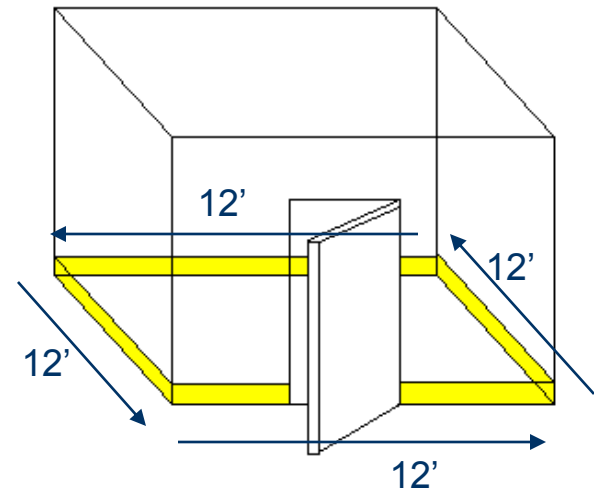
# Cove Base Installation - Calculation

Figure out the linear  
footage of your room:  
 $12' \times 4 = 48 \text{ LF}$

Find the material cost:  
 $\$1.00/\text{LF} * 48 \text{ LF} = \$48$

Find the labor cost:  
 $0.1 \text{ hr}/\text{LF} * \$53.00/\text{hr} * 48 \text{ LF} = \$255$

**Total Cost =  $\$48 + \$255 = \$303$**



# Electrical Outlet Installation

- This work is performed by the Electricians
- Rule of Thumb: \$250/each
- Basis of Design: standard duplex, non-dedicated convenience outlet
- Assumptions:
  - Outlet to be installed in hollow metal stud and drywall partition that can be fished.
  - Circuit is not already overloaded; i.e., another duplex can be added without violating any codes

# Key Core Change

- This work is performed by the Locksmiths
- Rule of Thumb: \$110/each (material & labor)
- Basis of Design: removal and replacement of key core in cylindrical lock set
- Assumptions:
  - Does not include keys. Locksmiths can provide keys at customer's request by delivery or at Lock Shop during key-making hours. Generally keys are \$1/each.

# Plumbing Fixture Replacement

- It generally takes about 2 hours for our plumbers to replace a fixture, which equates to approximately \$106.00 for the labor cost
- Material costs for items we generally replace:
  - Faucet: Sloan EBF battery-operated sensor faucet with 4" centers = \$475.00
  - Water Closet/Toilet: American Standard or Kohler floor or wall-mounted, with seat = \$150.00
  - Automatic Flushometer: Sloan Optima = \$350.00
  - Lavatory/Sink: 21" x 18" wall-mounted = \$100.00

# Asbestos Abatement

- This work is always performed by an EHRS-approved outside contractor and is monitored by EHRS; often on overtime working conditions.
- Cost varies, but minimum cost is generally \$1,200.00 for spaces up to 200 SF
- For larger spaces, a safe number to use for estimating is \$5/SF

# QUESTIONS?

