# Classic Coffers

*"The Best Overall Solution."*

Please visit our website at **classiccoffers.com**

877-297-2228

Classic Coffers

877-297-2228

## Option A

***Full Coffered System***

-The Ultimate beauty in wood ceilings. The full coffered ceiling system gives your room a look and feel that is unmatched by any other suspended ceiling. Transform your room from ordinary to extraordinary with Classic Coffers' suspended wood ceiling.

## Option B

***Wood Trim Molding with Some coffers***

-Take your drop ceiling to the next level with our wood trim moldings, and coffered panels. Accent the best parts of your room with the coffered panels and give it that classic look. By not using 100% Coffered panels you can reduce cost but still get that great coffered look where it counts.

## Option C

***Wood Trim Moldings with Standard Ceiling Tiles***

-This is the easiest and most affordable way to get that wood ceiling look in your home. Spice up that boring drop ceiling with our solid wood trim moldings.


## Acoustics

Classic Coffers Ceiling is designed to provide a variety of sound attenuation (noise control) and sound absorption (sound quality) properties. Through the use of micro-perforations in the wood coffer or custom fitted acoustic fabric panels, a full range of sound absorption properties can be achieved. Classic Coffers Ceilings have been laboratory tested in accordance to ASTM C423 & E795 under a variety of assembly conditions.

## Fire Rating

Classic Coffers Wood Coffer Ceiling System can also be coated to provide a Class A fire rating. Our system has been tested per ASTM E84-03a standards.

## Seismic

Our system attaches to a standard 15/16" Metal Tee grid system, and meets all required seismic specifications and standards. For more detail please see the grid manufacturer’s specifications.

# *Sustainability*

At Classic Coffers we know the importance of being environmentally friendly and are committed to producing products in sustainable ways. With smart design and the use of certified lumber and recycled goods, we are able to create a beautiful and eco-friendly product.

**Energy Savings**

**Suspended ceiling spaces use less energy than open plenum spaces due to:**

- Use of a return air plenum with low static pressures and fan horsepower vs. ducted air returns with higher static pressures and fan horsepower.
- Return air plenums are more efficient at removing heat from lights, reducing the air conditioning load in the space.
- Higher light reflectance with a ceiling vs. open plenum (assumed 70% vs. 50%).

**Energy savings are significant for suspended ceilings:**

- Total energy savings ranged from 9% to 10.3% for the office design and 12.7% to 17% for the retail design.
- Can contribute to LEED EA credit #1; 10.5% reduction in energy to earn 1 point, 14% reduction for 2 points.
- Considering both first-time and operating costs, suspended ceilings are extremely cost effective.

All the above information provided by CISCA. Learn more by visiting them at cisca.org.

**FSC Certification**

The FSC label provides a credible link between responsible production and consumption of forest products, enabling consumers and businesses to make purchasing decisions that benefit people and the environment as well as providing ongoing business value.

Learn more about FSC by visiting fsc.org

**Contributing to LEED® Points**

LEED certified projects have become a mainstay in the commercial building world, and our product can contribute to that certification. Our manufacturing process has been tailored to make sure that our product gives you the best chance to achieve these credits. Classic Coffers provides all of our products pre-cut and pre-finished packaged in recyclable materials to reduce job site mess. We manufacture our wood components using reclaimed, recycled, and FSC certified lumber that is harvested locally.

Here are the credits that our product contributes to:

- MR Credit 2.1 - Construction Waste Management/Divert from Landfill
- MR Credit 3.2 - Resource Reuse
- MR Credit 4.2 - Recycled Content Pre-Consumer
- MR Credit 5.1 - Regional Materials
- MR Credit 5.2 - Extracted and Manufactured Regionally
- MR Credit 7.0 - Certified Wood

To learn more about LEED visit the usgbc.org

# SECTION 095436 – CLASSIC COFFER WOOD CEILING SYSTEM

## PART 1 - GENERAL

### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

### 1.2 SUMMARY

A. This Section includes wood coffered ceiling system as manufactured by Classic Coffers, LLC, 16096 Lageman Lane, Brighton, IL 62012. Toll Free: 877 297 2228 Telephone: 618 372 4546 or Fax: 618 372 3788 - www.classiccoffers.com.

B. Related Sections include the following:

1. Division 01 Section "Sustainable Design Requirements" for additional LEED requirements.

### 1.3 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Shop Drawings: Show installation details including location and layout for wood coffered ceiling system.

C. Samples for Initial Selection: Manufacturer's color charts showing the full range of colors and finishes, and species list available for wood coffered ceiling system.

D. Samples for Verification: As requested by Architect.

### 1.4 QUALITY ASSURANCE

A. Source Limitations: For field-finished wood coffered ceiling system, obtain each species, grade, and cut of wood from one source with resources to provide materials and products of consistent quality in appearance and physical properties.

B. Forest Certification: Provide wood coffered ceiling system produced from wood obtained from forests certified by an FSC-accredited certification body to comply with FSC 1.2, "Principles and Criteria."

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver wood coffered ceiling system materials in unopened cartons or bundles and store in a dry, warm, ventilated, weather-tight location.

1.6 PROJECT CONDITIONS

A. Install wood coffered ceiling system after other finishing operations, including painting, have been completed.

PART 2 - PRODUCTS

2.1 WOOD CLASSIC COFFERED CEILING SYSTEM

A. Provide all parts necessary for a completed installation of Classic Coffers Ceiling System.
   1. Manufacturers: Subject to compliance with requirements, provide wood coffered ceiling system by Classic Coffers, LLC, 16092 Lageman Lane, Brighton, IL 62012. Toll Free: 877 297 2228 Telephone: 618 372 4546 or Fax: 618 372 3788 - www.classiccoffers.com.
   2. Use only ***[Oak]***, ***[Maple]***, ***[Cherry]***, ***[Walnut]***, ***[Poplar]***, or ***[Other Specified]*** wood species in the construction of the Classic Coffers Wood Coffered Ceilings.
   3. The Classic Coffers Wood Ceiling System is based on a standard 15/16" x 2' x 2' suspension grid. It consists of a ***[2-1/4" deep]***, ***[3-1/4" deep]***, ***[5-1/4" deep]***, or ***[Flat Panel]*** profile.
   4. Coffered panels must be constructed by using spring U-clips to allow for expansion and contraction, eliminating the separation of joints. Coffers using glued or nailed together coffered panels are not acceptable.
   5. Classic Coffers Wood Ceiling System shall to be stained with ***[Natural]***, ***[Autumn]***, ***[Cordovan]***, or ***[Other Specified]*** stain.
   6. The Classic Coffers Wood Ceiling System shall be finished with ***[Clear Satin]***, ***[Class A]***, or ***[Other Specified]*** finish.
   7. Border panels to consist of ***[Flat wood panels matching the finish of the coffers]***, ***[Custom size coffers]***, or ***[Standard acoustical tiles supplied by installing contractor]***.
   8. Classic Coffers Wood Ceiling System panels shall be constructed as ***[Non-Perforated]*** or ***[Acoustically Perforated Panels]***.
   9. The designated panels on the drawings ***[Shall] [Shall Not]*** have custom laser cut logos or designs.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas and conditions, with Installer present, for compliance with requirements for installation tolerances, and other conditions affecting performance of the Classic Coffers Wood Ceiling System.

3.2 PREPARATION

A. Vacuum and hand wipe clean area where ceiling is to be installed immediately before product installation. After cleaning, examine substrates for any additional substances requiring removal. Proceed with installation only after unsatisfactory conditions have been corrected.

3.3 INSTALLATION

A. Comply with Classic Coffers Wood Ceiling System manufacturer's written installation instructions.

3.4 PROTECTION

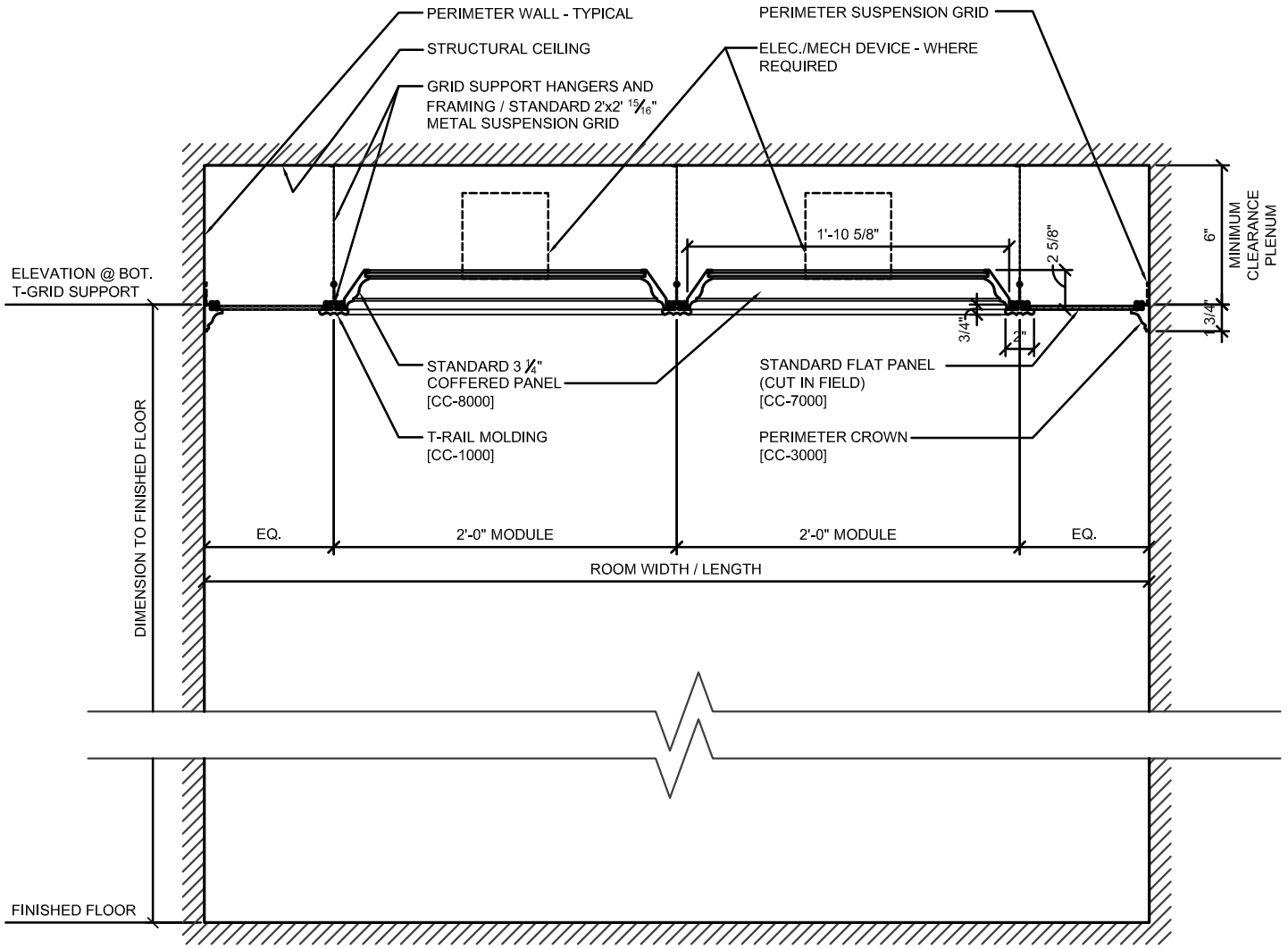
A. Protect installed Classic Coffers Wood Ceiling System during remainder of construction period.

END OF SECTION 096400

Classic Coffers
16092 Lageman Lane
Brighton, IL 62012
Ph: (877) 297-2228 Fax: (618) 372-3788

# SPEC-DATA SHEET
## *Suspended Hardwood Ceiling Systems*

| PART NUMBER | DESCRIPTION | DIMENSIONS | | | WEIGHT |
|---|---|---|---|---|---|
| | | Length | Width | Thickness | Lbs. |
| CC-0000 | CUSTOM DESIGNATION | -- | -- | -- | -- |
| CC-1000 | T-RAIL MOLDING | 21-1/2" | 2" | 3/4" | 0.45 |
| CC-2000 | TRANSITION BLOCK | 2-1/2" | 2-1/2" | 7/8" | 0.09 |
| CC-3000 | PERIMETER CROWN | 21-1/2" | 1-3/4" | 1-1/4" | 0.62 |
| CC-4000 | PERIMETER TRANSITION BLOCK | 2-1/2" | 2" | 1-3/8" | 0.13 |
| CC-5000 | PERIMETER INSIDE CORNER | 2-1/2" x 2-1/2" | 2" | 1-3/8" | 0.16 |
| CC-6000 | PERIMETER OUTSIDE CORNER | 2-1/2" x 2-1/2" | 2" | 1-3/8" | 0.16 |
| CC-7000 | STANDARD FLAT PANEL | 22-5/8" | 15-1/2" | 1/2" | 3.53 |
| CC-7100 | LARGE FLAT PANEL | 22-5/8" | 22-5/8" | 1/2" | 5.13 |
| CC-8000 | STANDARD 3 1/4" COFFERED PANEL | 22-5/8" | 22-5/8" | 2-5/8" | 5.57 |
| CC-8100 | 2 1/4" LOW PROFILE COFFERED PANEL | 22-5/8" | 22-5/8" | 2-5/8" | 5.02 |
| CC-8200 | 5 1/4" HIGH PROFILE COFFERED PANEL | 22-5/8" | 22-5/8" | 2-5/8" | 6.12 |
| CC-9000 | OFFSET T-RAIL MOLDING | 21-1/2" | 2" | 3/4" | 0.5 |
| CC-9100 | OFFSET TRANSITION BLOCK | 2-1/2" | 2-1/2" | 7/8" | 0.1 |
| CC-CLIPS | INSTALLATION CLIPS | n/a | n/a | n/a | n/a |
| CC-TOOL | INSTALLATION TOOL | n/a | n/a | n/a | n/a |




LEGEND / ABBREVIATIONS

BOT = BOTTOM
CC = CLASSIC COFFER
ELECT = ELECTRICAL
EQ = EQUAL
MECH = MECHANICAL
T-GRID= METAL SUSPENSION GRID

NOTES

1. SUSPENSION GRID NOT SUPPLIED BY CC.
2. ELEC/MECH DEVICES NOT SUPPLIED BY CC.
3. ITEMS SHOWN DASHED ARE TYPICALLY NOT SUPPLIED BY CC.
4. STANDARD ATTACHMENT CLIPS ARE SUPPLIED BY CC.
5. CUT IN FIELD ITEMS ARE PROVIDED IN STANDARD LENGTHS AND ARE CUT IN FIELD BY OTHERS.

# TYPICAL CEILING SECTION

1

1" = 1'-0"

Classic Coffers, LLC
16092 Lageman Lane
Brighton, IL 62012
(877) 297-2228

PROJ. TYPICAL CLASSIC COFFERS CEILING SECTION

SHT(s). REF. TO BE DETERMINED

ENG./ARCH. TO BE DETERMINED

G.C. TO BE DETERMINED

CEILING DETAIL

BY Scott scott@classiccoffers.com

CC PROJ. # 09-0000

DATE 06-10-10

SHEET SECT-1

## HOW THE SYSTEM WORKS

The Wood Ceiling Clips onto a standard 2' by 2' 15/16" suspended metal T-grid system.

1

**Unique Clip Design**
allows each trim peice to be easily clipped into place.

2

T-Rail reveal
**molding is clipped**
on to the grid.

3

Rosette block provides excellent joints at each intersection and yet
**allows the entire system to easily flex**
with changing environment conditions.

4

Entire **grid is covered** with wood trim.

5

Perimeter crown and
**pre-mitered corners**
finish off the perimeter of the room.

6

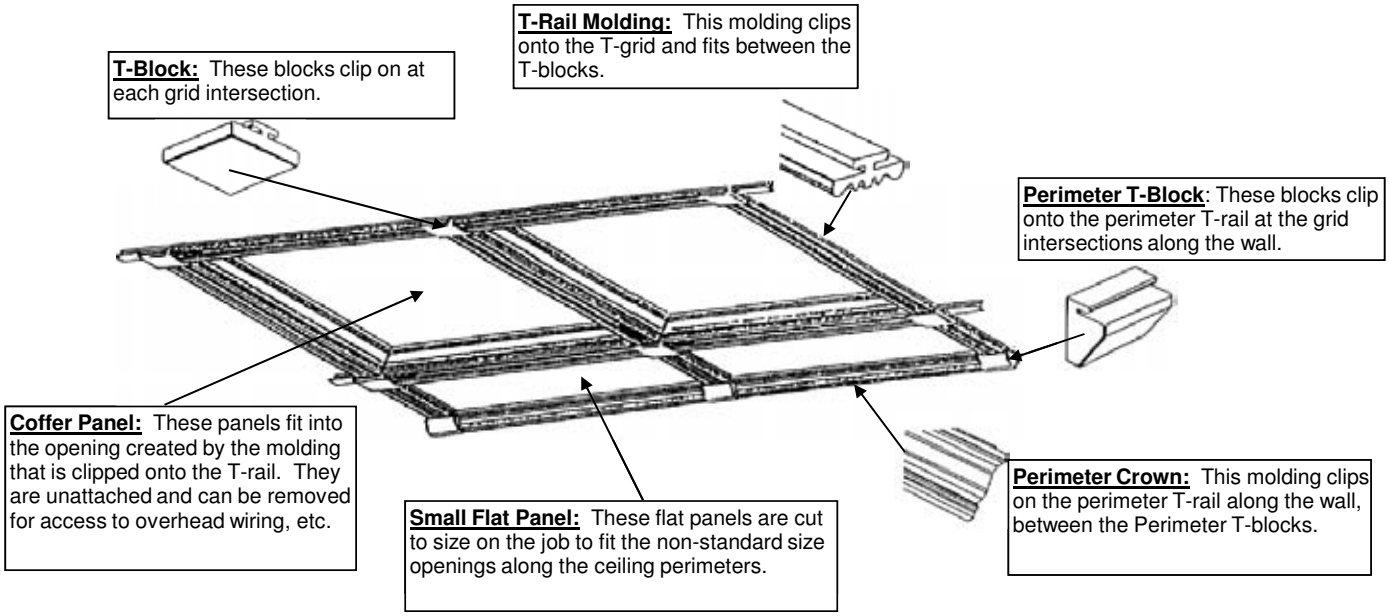
Coffered wood panel fits into opening and can be removed for
**access to the ceiling.**

7

Voila!!
Your room now has the
**beauty and warmth**
of what appears to be an expensive, custom milled hardwood ceiling.

# PARTS CALCULATION INSTRUCTIONS


## *DESCRIPTION OF KEY PARTS*



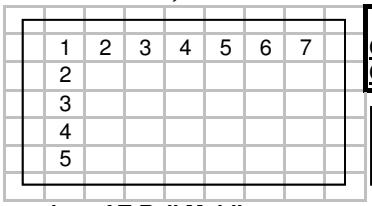

**NOTE:** One key to an attractive installation is the perimeter border which consists of a flat panel that can be cut to size on the job to fit the less than full size perimeter sections around the border. Very few rooms measure in exact multiples of 2' and therefore it is necessary to have a border that can be cut to size. Center the 2'x2' grids in the room and determine the remaining perimeter dimension in each direction. For rooms with a calculated border of less than 3.5" in a given direction, we recommend that you shift the grid layout, by eliminating one full row of 2'x2' grid, so that the perimeter on each side of the room is increased by 12". This allows for better spacing between the Perimeter Crown and the T-rail molding, which gives a more attractive appearance.

**Helpful Information before beginning parts calculation.**

- **The product attaches to a suspended T-Grid system.**
- **If the grid is already in place, carefully draw the existing grid layout on the tear sheet and then follow these instructions.**
- **If a new grid is to be installed, check grid manufacturer web site for help in determining grid parts and layout necessary for your room. Read these instructions first so that you can design a layout that is best for the product installation.**
- **The ceiling needs 6" of clearance from the top of the ceiling to the face of the suspended grid.**
- **The ceiling adds about 3 pounds per square foot of weight to the grid. This is well within specifications of a suspended grid installed to the manufacturers specifications.**

**FOR A RECTANGULAR ROOM**

**STEP 1** **Draw the layout of the room on the tear sheet provided. Each square represents a 2'x2' section of T-grid. We suggest you center the 2'x2' grids so that there is an equal size perimeter on both sides of the length direction and an equal size perimeter on both sides of the width direction.**
**Note: If the calculated perimeter is 0" to 3.5", we recommend that you remove one row (column) of 2'x2' grid so that the perimeter increases by 12" on each side of the room in that direction**
***Example: Room size L=15' 2", W=11' 10"***

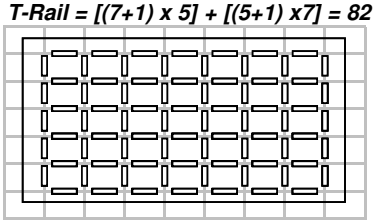



**Calculate CL and CW**
**CL = number of 2'x2' squares in length direction = 7**
**CW = number of 2'x2' squares in width direction = 5**

**For the example, there are seven 2'x2' panels in the length direction leaving a 7" perimeter on each side. In the width direction there are five 2'x2' panels, leaving an 11" perimeter on each side.**

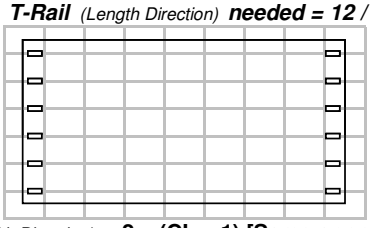
**STEP 2** **Calculate the number of T-Rail Molding**

Step 2a **Calculate the number of T-Rail Molding needed to cover the area that includes all the full panels**
**T-Rail = [(CL + 1) x CW] + [(CW + 1) x CL]**
***Example: T-Rail = [(7+1) x 5] + [(5+1) x7] = 82***



**Calculate the number of T-Rail molding for the less than full grid sections around the perimeter**

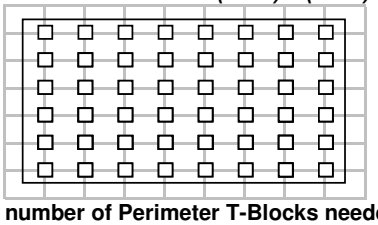
Step 2b **T-Rail** (Length Direction) **= 2 x (CW + 1)**
Note: The T-Rail for the perimeter will be cut to size on the job to match the exact length needed. Standard T-Rail is 21.5" in length.
If the perimeter is less than 10 inches, then 2 pieces can be obtained from each T-rail and the count is divided by 2.
***Example: T-Rail = 2 x (5 + 1) = 12 (Since the perimeter < 10", each T-Rail will make 2 pieces)***
***T-Rail*** *(Length Direction)* ***needed = 12 / 2 = 6***



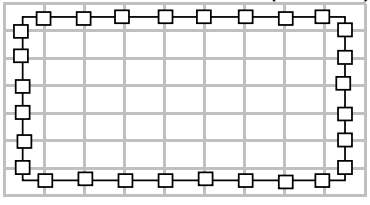
Step 2c **T-Rail** (Width Direction) **= 2 x (CL + 1) [Same approach as Step B]**
***Example: T-Rail = 2 x (7+ 1) = 16 (Since the perimeter > 10", each T-Rail will make only 1 piece)***
***T-Rail*** *(Width Direction)* ***needed = 16***

Step 2d **Calculate the total T-Rail Molding needed**
**T-Rail = Step 2a + Step 2b + Step 2c**
***Example: 82 + 6 + 16 = 104*** *(Enter on the order sheet in the row labeled "T-Rail Molding")*

**STEP 3** **Calculate the number of transition blocks(T-Blocks) needed by using the following formula**
**Transition Blocks = (CL + 1) x (CW + 1)**
***Example: Transition Blocks = (7 + 1) x (5 + 1) = 48*** *(Enter on order sheet in the row labeled "T-Blocks")*



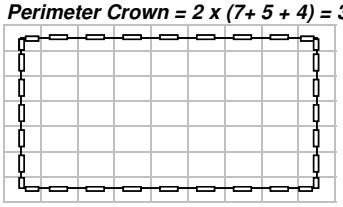
**STEP 4** **Calculate the number of Perimeter T-Blocks needed by using the following formula**
**Perimeter T-Blocks = 2 x (CL + CW + 2)**
***Example: Perimeter T-Blocks = 2 x (7 + 5 + 2) = 28*** *(Enter on order sheet in the row labeled "Perimeter T-Block")*



**STEP 5 Calculate the number of Perimeter Crown**

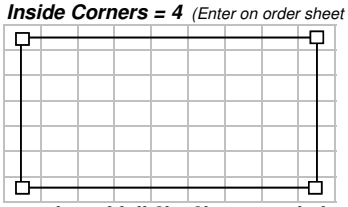
**Perimeter Crown = 2 x (CL + CW + 4)**

***Example: Perimeter Crown = 2 x (7+ 5 + 4) = 32*** *(Enter on order sheet in the row labeled "Perimeter Crown")*



**STEP 6 Add the "Inside Corners"**

***Example: Inside Corners = 4*** *(Enter on order sheet in the row labeled "Inside Corners")*

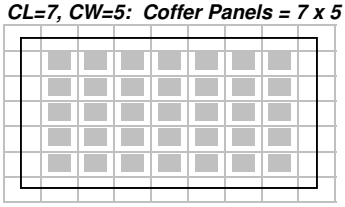


**STEP 7 Determine the number of full 2' x 2' squares in both the length(CL) and width(CW) direction**

(Note: if the dimension is an exact multiple of 2', we recommend that you reduce the count by 1. This will leave a 12" perimeter on each end of the room along that dimension.)

**Coffer panels = CL x CW**

***Example: CL=7, CW=5: Coffer Panels = 7 x 5 = 35*** *(Enter on order sheet in the row labeled "Coffer Panels")*



**STEP 8 Calculate the number of flat panels for the perimeter**

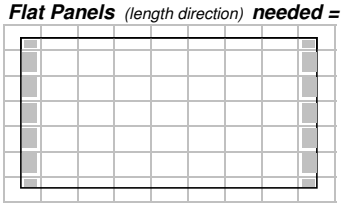
Note: Flat panels come in 15 3/4" (Small) and 22 3/4" (Large) sizes. In special cases where the perimeter opening is greater than 15 3/4" then large flat panels should be ordered.

Note: If the perimeter is 7" or less, then one small flat panel will make two pieces and the count below is divided by 2.

Step a **Flat Panels** (Length Direction) **= 2 x (CW + 2)**

***Example: Flat Panels*** *(length direction)* ***= 2 x ( 5 + 2) = 14*** (Since perimeter ≤ 7", each panel will make 2 pieces)

***Flat Panels*** *(length direction)* ***needed = 14 / 2 = 7***



Step b **Flat Panels** (Width Direction) **= 2 x CL**

***Example: Flat Panels*** *(width Direction)* ***= 2 x 7 = 14*** *(perimeter in the width direction is 11", each panel will make only 1 piece)*

Step c **Total Flat Panels = Flat Panels** (Length Direction) **+ Flat Panels** (Width Direction)

***Example: Total Flat Panels = 7 + 14 = 21*** *(Enter on order sheet in row labeled "Small Flat Panels")*

**STEP 9 Calculate the bags of U-Clips (see instructions on the order sheet)**

***Example: U-clips = 650 = roundup to 7 (Bags of 100)*** *(Enter on the order sheet in the row labeled "U-Clips")*

**STEP 10 Finalize the Order**

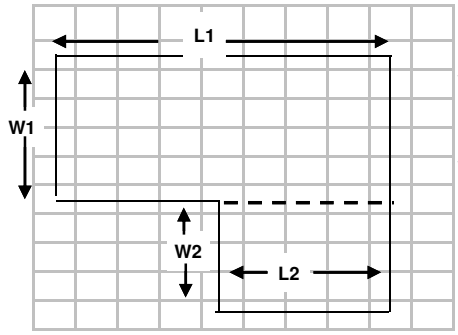
**Add any additional parts desired and total each row. We recommend 1 of each of the small parts.**

**We recommend you order 1 clip insert tool for ease in installing the U-clips**

| | | Counted Parts | | *Step 10* Added Parts | | Total Parts | | | | *Step 9* Calculation for U-Clips |
|---|---|---|---|---|---|---|---|---|---|---|
| ***Step 2d*** | **T-Rail Molding (Length 21.5")** | 104 | + | 1 | = | 105 | x 4 | = | | 420 |
| ***Step 3*** | **T- Block** | 48 | + | 1 | = | 49 | x 2 | = | | 98 |
| ***Step 4*** | **Perimeter T-Block** | 28 | + | 1 | = | 29 | x 2 | = | | 58 |
| ***Step 5*** | **Perimeter Crown (Length 21.5")** | 32 | + | 1 | = | 33 | x 2 | = | | 66 |
| ***Step 6*** | **Inside Corners** | 4 | + | | = | 4 | x 2 | = | | 8 |
| | **Outside Corners** | | + | | = | 0 | x 2 | = | | 0 |
| ***Step 7*** | **Coffer Panels** | 35 | + | | = | 35 | TOTAL= | | | 650 |
| ***Step 8c*** | **Small Flat Panels (15 3/4" x 22 3/4")** | 21 | + | | = | 21 | | | | |
| | **Large Flat Panels (22 3/4" x 22 3/4")** | | + | | = | 0 | | | | |
| ***Step 9*** | **U-Clips (Bags of 100)** | | | | | 7 | Round up to Nearest 100 | | | |
| ***Step 10*** | **Clip Insert Tool** | | | | = | 1 | | | | |

## HINTS FOR ROOMS THAT ARE NOT RECTANGULAR

### L-SHAPED ROOM




**Example**
**L1 = 15' 2"**
**W1 = 9' 6"**

**L2 = 7' 8**
**W2=7' 2"**

**STEP 1** Use the procedure for calculating parts for a rectangular room with L = L1, W = W1
**STEP 2** Use the procedure for calculating parts for a rectangular room with L = L2, W = W2
**STEP 3** Add the parts in STEP 1 & STEP 2
**STEP 4** The total parts determined in STEP 3 need to adjusted for the parts that occur at the intersection
Coffer Panels: Count the full 2'x2' squares (CD) along the dashed line and add this to the count
*Example: CD = 3*
Perimeter Crown: Subtract the amount: 2 x (CD + 2) from count calculated in STEP 3
Perimeter T-Block: Subtract the amount 2 x (CD + 1) from the count calculated in STEP 3
Small Flat Panel: Subtract the amount CD + 2 from the count calculated in STEP 3
Inside Corners: Subtract 3 inside corners
Outside Corners: Add 1 Outside Corner
Large Flat Panel: Add 1 Large Flat Panel for the perimeter around the outside corner

***Example***

| | L1-W1 | L2-W2 | STEP 4 | TOTAL |
|---|---|---|---|---|
| T-Rail Molding | 80 | 36 | n/a | 116 |
| T-Block | 40 | 16 | n/a | 56 |
| Perimeter T-Block | 26 | 16 | -8 | 34 |
| Perimeter Crown | 30 | 20 | -10 | 40 |
| Inside Corners | 4 | 4 | -3 | 5 |
| Outside Corners | 0 | 0 | 1 | 1 |
| Coffer Panels | 28 | 9 | 3 | 40 |
| Small Flat Panel | 20 | 13 | -5 | 28 |
| Large Flat Panels | 0 | 0 | 1 | 1 |

### IRREGULAR SHAPED ROOMS

Many rooms have indentations or areas that jut out into the room. In these cases, the simplest approach for determing the parts that are needed is as follows

**STEP 1** Draw the layout of the room on the tear sheet provided
**STEP 2** Determine the largest rectangular area of 2'x2' squares and draw a perimeter around this area
**STEP 3** Use the procedure for rectangular rooms steps 2 thru 4a to determine the number of coffer panels, T-Rail Reveal Molding and Transition blocks for this area
**STEP 4** Now physically count any additional coffer panels, T-Rail molding and Transition Blocks and add to STEP 3
**STEP 5** Physically count the number of Perimeter Mini Crown, Perimeter T-Blocks, Small and Large Flat Panels, and Inside and Outside Corners. Add these to the order sheet
**STEP 7** Always double check your calculations to assure that you have counted all parts.

### FOR HELP WITH A COMPLICATED LAYOUT

***Call 1-877-297-2228***

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Classic Coffers

Residential Home Theatre

Douglas Fir with Custom Color Finish

Glendale, CA

Bar and Restaurant

Oak with Custom Black Finish

Edmonton, Alberta Canada