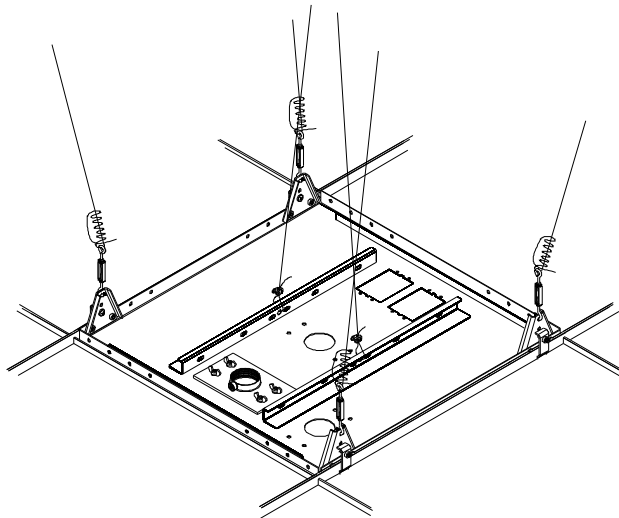


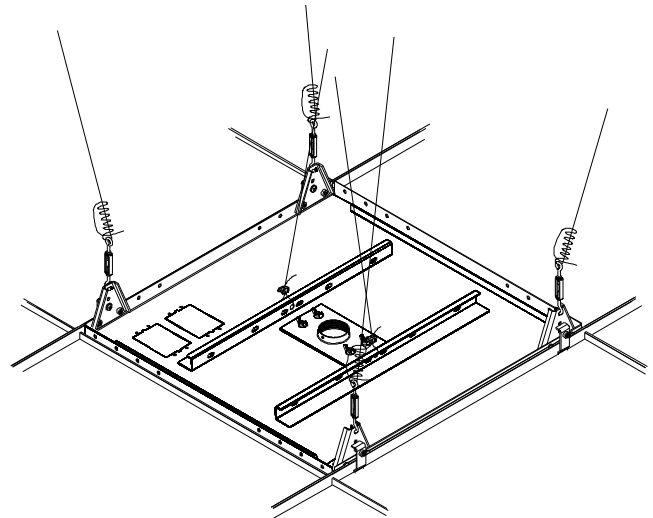
INSTALLATION INSTRUCTIONS

Instrucciones de instalación
Installationsanleitung
Instruções de Instalação

Istruzioni di installazione
Installatie-instructies
Instructions d'installation



CMA450



CMA455

Suspended Ceiling Kit

Juego de techo suspendido
Hängedecken-Kit
Kit de instalação de teto suspenso
Kit di sospensione a soffitto
Vrijhangend-plafondkit
Kit de plafond suspendu

DISCLAIMER

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IMPORTANT WARNINGS AND CAUTIONS!

WARNING: A WARNING alerts you to the possibility of serious injury or death if you do not follow the instructions.

CAUTION: A CAUTION alerts you to the possibility of damage or destruction of equipment if you do not follow the corresponding instructions.

WARNING: Failure to read, thoroughly understand, and follow all instructions can result in serious personal injury, damage to equipment, or voiding of factory warranty! It is the installer's responsibility to make sure all components are properly assembled and installed using the instructions provided.

WARNING: Failure to provide adequate structural strength for this component can result in serious personal injury or damage to equipment! It is the installer's responsibility to make sure the structure to which this component is attached can support five times the combined weight of all equipment. Reinforce the structure as required before installing the component.

WARNING: Exceeding the weight capacity can result in serious personal injury or damage to equipment! It is the installer's responsibility to make sure the combined weight of all components attached to the CMA450/455 does not exceed the following:

- **CMA450:** Extension column installation to *center* hole: 250 lbs (113 kg)
- **CMA450:** Extension column installation to *side* or *corner* hole: 125 lbs (56 kg)
- **CMA455:** 250 lbs (113 kg)

¡AVISOS y PRECAUCIONES IMPORTANTES!

AVISO: Un AVISO llama su atención sobre la posibilidad de sufrir lesiones de gravedad o incluso mortales si no sigue las instrucciones.

PRECAUCIÓN: Una nota de PRECAUCIÓN llama su atención sobre la posibilidad de dañar o destruir el equipo si no sigue las instrucciones.

AVISO: Si no lee, comprende perfectamente y sigue todas las instrucciones, podría causar daños graves daños personales y materiales o anular la garantía de fábrica. El instalador es el responsable de asegurarse de que todos los componentes están correctamente montados e instalados siguiendo las instrucciones indicadas.

AVISO: Si no se proporciona la resistencia estructural adecuada para este componente, podrían provocarse graves daños personales o materiales. El instalador es el responsable de asegurarse de que la estructura a la que este componente está sujeta puede soportar cinco veces el peso combinado de todo el equipo. Refuerce la estructura según sea necesario antes de instalar el componente.

AVISO: Si se excede el peso máximo, podrían causarse graves daños personales o materiales. El instalador es responsable de asegurarse de que el peso combinado de todos los componentes montados en el CMA450/455 no excede los siguientes máximos:

- **CMA450:** Instalación de la barra de extensión en el orificio central: 113 kg (250 lbs)
- **CMA450:** Instalación de la barra de extensión en un orificio lateral o de una esquina: 56 kg (125 lbs)
- **CMA455:** 113 kg (250 lbs)

WICHTIGE WARN- und VORSICHTSHINWEISE!

WARNUNG: Ein WARNHINWEIS macht auf mögliche schwere oder tödliche Verletzungen aufmerksam, die bei Nichtbefolgung der Anweisungen eintreten können.

VORSICHT: Ein VORSICHTSHINWEIS macht auf Schäden oder mögliche Zerstörung des Geräts aufmerksam, die bei Nichtbefolgung der Anweisungen eintreten können.



WARNUNG: Falls nicht alle Anweisungen gelesen und gut verstanden werden, kann dies zu schweren Körperverletzungen, Schaden an den Geräten führen und die Werksgarantie nichtig machen! Der Monteur ist dafür verantwortlich, dass alle Komponenten unter Einhaltung der mitgelieferten Anweisungen korrekt zusammengebaut und eingebaut werden.



WARNUNG: Wenn für diese Komponente keine ausreichende bauliche Tragkraft vorhanden ist, kann dies zu schweren Körperverletzungen oder Schäden an den Geräten führen! Der Installateur ist dafür verantwortlich zu überprüfen, ob die Wand, an der diese Komponente verankert wird, das Fünffache der Gesamtlast aller befestigten Geräte sicher tragen kann. Andernfalls muss die Wand verstärkt werden, bevor die Komponente angebracht wird.



WARNUNG: Die Überschreitung der Tragfähigkeit kann zu schweren Körperverletzungen oder Schäden an den Geräten führen! Der Installateur ist dafür verantwortlich sicherzustellen, dass das Gesamtgewicht aller am CMA450/455 befestigten Komponenten folgende Werte nicht überschreitet:

- **CMA450:** Installation des Auszugs im mittleren Loch: 113 kg (250 lbs)
- **CMA450:** Installation des Auszugs im seitlichen oder Eckloch: 56 kg (125 lbs)
- **CMA455:** 113 kg (250 lbs)



ADVERTÊNCIAS e AVISOS IMPORTANTES!



ADVERTÊNCIA: Os alertas de ADVERTÊNCIA avisam-no para a possibilidade de ocorrência de graves lesões ou morte no caso de incumprimento das instruções.



AVISO: Os alertas de AVISO avisam-no para a possibilidade de danos ou destruição do equipamento no caso de incumprimento das instruções.



ADVERTÊNCIA: Se não ler, compreender completamente e seguir todas as instruções podem ocorrer graves lesões pessoais, danos no equipamento e a garantia de fábrica pode ser anulada! É da responsabilidade do instalador certificar-se de que todos os componentes são correctamente montados e instalados de acordo com as instruções fornecidas.



ADVERTÊNCIA: Se não for proporcionado apoio estrutural adequado a este componente podem ocorrer graves lesões pessoais ou danos no equipamento! É da responsabilidade do instalador certificar-se de que a estrutura à qual este componente é ligado pode suportar cinco vezes o peso combinado de todo o equipamento. Reforce a estrutura conforme necessário antes de instalar o componente.



ADVERTÊNCIA: Exceder a capacidade de peso pode resultar em graves lesões pessoais ou danos no equipamento! É da responsabilidade do instalador certificar-se de que o peso combinado de todos os componentes ligados ao CMA450/455 não excede o seguinte:

- **CMA450:** Instalação da coluna de extensão no furo central: 113 kg (250 lbs)
- **CMA450:** Instalação da coluna de extensão no furo lateral ou do canto: 56 kg (125 lbs)
- **CMA455:** 113 kg (250 lbs)



AVVERTENZE e PRECAUZIONI IMPORTANTI!



AVVERTENZA: Un'AVVERTENZA mette in guardia in merito alla possibilità di gravi infortuni, anche letali, qualora non si osservino le istruzioni.



ATTENZIONE: Un'ATTENZIONE indica la possibilità di gravi danni all'attrezzatura qualora non ci si attiene alle istruzioni al riguardo.



AVVERTENZA: La mancata comprensione e ottemperanza alle istruzioni fornite può provocare gravi lesioni personali, danni all'apparecchiatura o annullare la garanzia fornita dal produttore. Spetta all'installatore verificare che tutti i componenti siano assemblati correttamente e installati secondo le istruzioni fornite.



AVVERTENZA: Una resistenza strutturale inadeguata per questo componente può arrecare gravi infortuni o danneggiare l'apparecchiatura. È responsabilità dell'installatore verificare che la struttura alla quale è fissato il componente sostenga con sicurezza cinque volte il carico combinato di tutta l'apparecchiatura. Rinforzare la struttura secondo necessità prima di installare i componenti.



AVVERTENZA: Un peso superiore alla capacità nominale può arrecare gravi infortuni o danneggiare l'apparecchiatura! È responsabilità dell'installatore verificare che il peso totale di tutti i componenti montati sul CMA450/455 non superi i valori seguenti:

- **CMA450:** dalla colonna di prolunga al foro centrale: 113 kg (250 lbs)
- **CMA450:** dalla colonna di prolunga al foro laterale o d'angolo: 56 kg (125 lbs)
- **CMA455:** 113 kg (250 lbs)



BELANGRIJKE AANWIJZINGEN en WAARSCHUWINGEN!



WAARSCHUWING: Een WAARSCHUWING vestigt uw aandacht op de mogelijkheid van ernstig of dodelijk letsel als u de instructies niet opvolgt.



VOORZICHTIG: De aanwijzing VOORZICHTIG vestigt uw aandacht op de mogelijkheid van beschadiging of onherstelbare beschadiging van de apparatuur als u de betreffende instructies niet opvolgt.



WAARSCHUWING: Door niet alle instructies te lezen, volledig te begrijpen en op te volgen, riskeert u ernstig persoonlijk letsel, beschadiging van de apparatuur en het vervallen van de fabrieksgarantie. Degene die het product installeert is ervoor verantwoordelijk dat alle onderdelen aan de hand van de meegeleverde handleiding op de juiste wijze worden samengebouwd en gemonteerd.



WAARSCHUWING: Als u voor deze component onvoldoende constructiesterkte beschikbaar stelt, riskeert u ernstig persoonlijk letsel of beschadiging van de apparatuur! Degene die de structuur monteert waaraan deze component is bevestigd, is ervoor verantwoordelijk dat deze minimaal vijf maal het gezamenlijke gewicht van alle apparatuur kan dragen. Zonodig dient u de structuur vóór de montage van de component te versterken.



WAARSCHUWING: Het overschrijden van de gewichtscapaciteit kan ernstig persoonlijk letsel of schade aan apparatuur veroorzaken! Het is de verantwoordelijkheid van de installateur om ervoor te zorgen dat het gecombineerde gewicht van alle onderdelen die aan de CMA450/455 worden gehecht het volgende niet overschrijden:

- **CMA450:** De aan het midden gat geïnstalleerde verlengingskolom: 113 kg (250 lbs)
- **CMA450:** Geïnstalleerde verlengingskolom aan het gat aan de zijkant of hoek: 56 kg (125 lbs)
- **CMA455:** 113 kg (250 lbs)



IMPORTANTES AVERTISSEMENTS et PRÉCAUTIONS!



AVERTISSEMENT: Un AVERTISSEMENT vous met en garde contre les possibilités de blessures graves ou de danger de mort si vous ne suivez pas les instructions.



PRÉCAUTION: Une PRÉCAUTION vous met en garde contre les possibilités d'endommagements et de destruction de l'équipement si vous ne suivez pas les instructions correspondantes.



AVERTISSEMENT: Le manque de la lecture, de la compréhension et du respect total de toutes les instructions, peut entraîner des blessures corporelles graves, endommager l'équipement ou annuler la garantie d'usine. Il incombe à l'installateur de s'assurer que tous les composants sont correctement assemblés et installés à l'aide des instructions fournies.



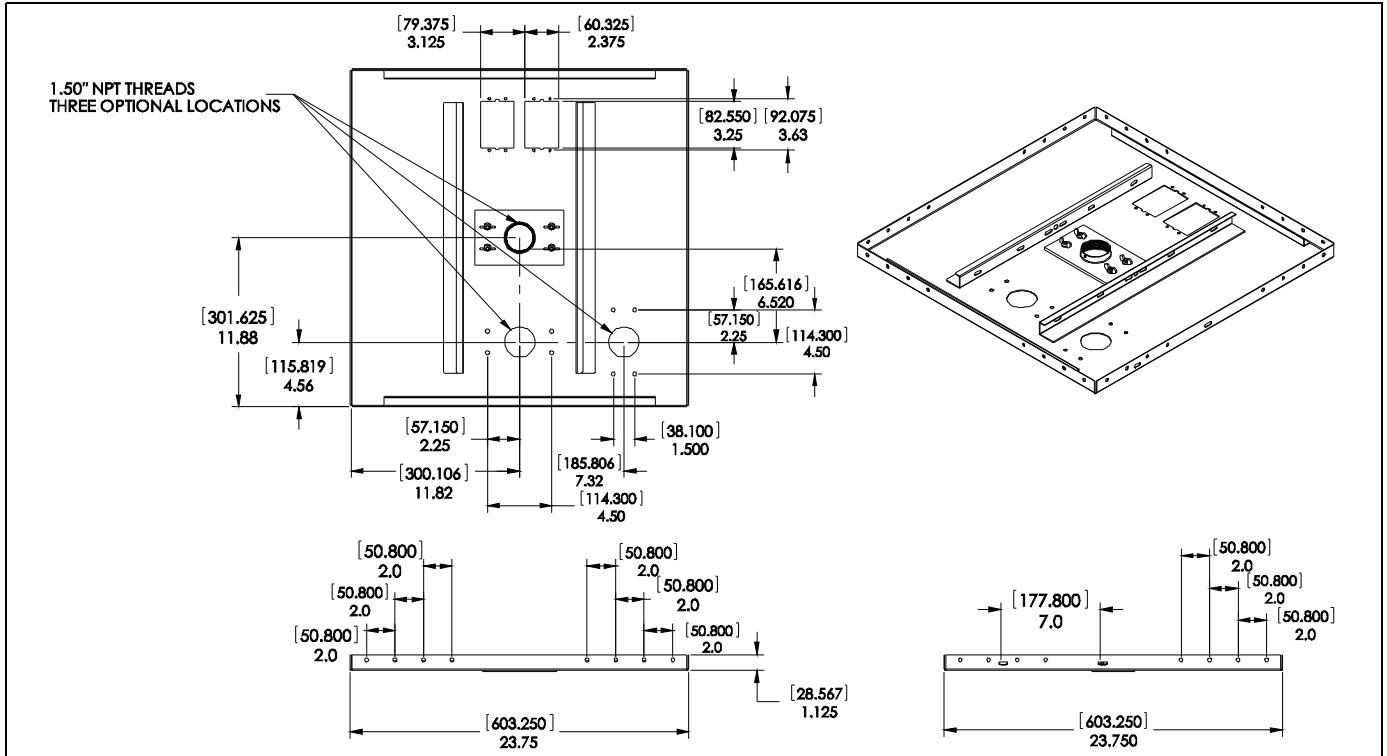
AVERTISSEMENT: L'absence de l'apport d'une résistance structurelle appropriée pour ce composant peut entraîner des blessures corporelles graves ou endommager l'équipement. Il incombe à l'installateur de s'assurer que la structure à laquelle le composant est attaché peut soutenir cinq fois le poids combiné de tout l'équipement. Renforcer la structure selon les besoins avant l'installation du composant.



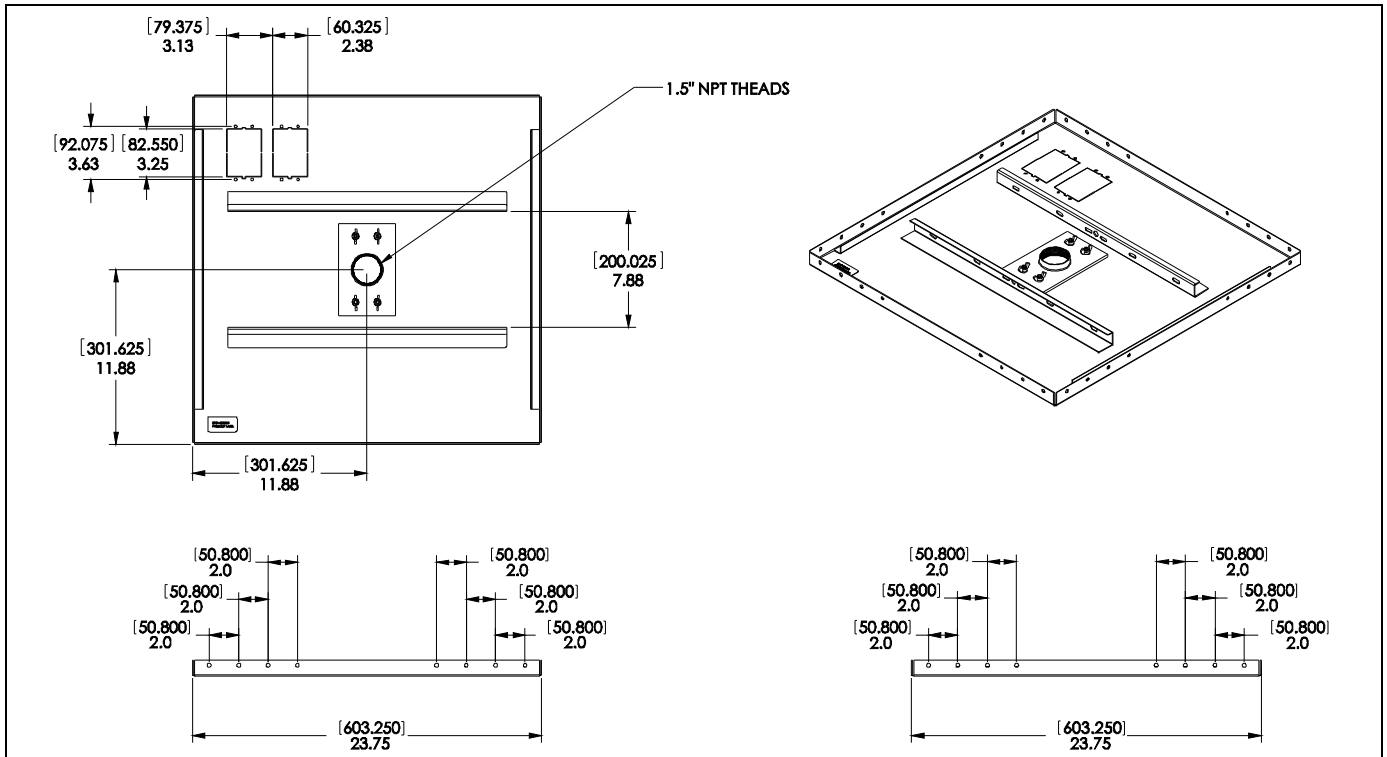
AVERTISSEMENT: Dépassez le poids maximal peut résulter en des blessures graves ou des dommages à l'équipement ! Il en est de la responsabilité de l'installateur de s'assurer que la somme totale de tous les composants fixés au CMA450/455 ne dépasse pas les limites suivantes :

- **CMA450:** Installation de la colonne d'extension au trou central : 113 kg (250lbs)
- **CMA450:** Installation de la colonne d'extension au trou se trouvant sur le coté ou sur le coin : 56 kg (125lbs)
- **CMA455:** 113 kg (250 lbs)


DIMENSIONS (CMA450)





DIMENSIONS (CMA455)



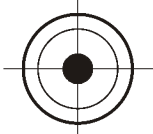
LEGEND


	Tighten Fastener
	Apretar elemento de fijación
	Befestigungsteil festziehen
	Apertar fixador
	Serrare il fissaggio
	Bevestiging vastdraaien
Serrez les fixations	


	Measure
	Medir
	Messen
	Medir
	Misurare
	Meten
	Mesurer


	Phillips Screwdriver
	Destornillador Phillips
	Kreuzschlitzschraubendreher
	Chave de fendas Phillips
	Cacciavite a stella
	Kruiskopschroevendraaier
Tournevis à pointe cruciforme	


	By Hand
	A mano
	Von Hand
	Com a mão
	A mano
	Met de hand
À la main	


	Target of Projector
	Punto de enfoque del proyector
	Ziel des Projektors
	Mira do projector
	Punto di proiezione
	Doel van de projector
Cible du projecteur	


	Hammer
	Martillo
	Hammer
	Martelo
	Martello
	Hamer
Marteau	


	Pencil Mark
	Marcar con lápiz
	Stiftmarkierung
	Marcar com lápis
	Segno a matita
	Potloodmerkteken
Marquage au crayon	

	Drill Hole
	Perforar
	Bohrloch
	Fazer furo
	Praticare un foro
	Gat boren
Percez un trou	

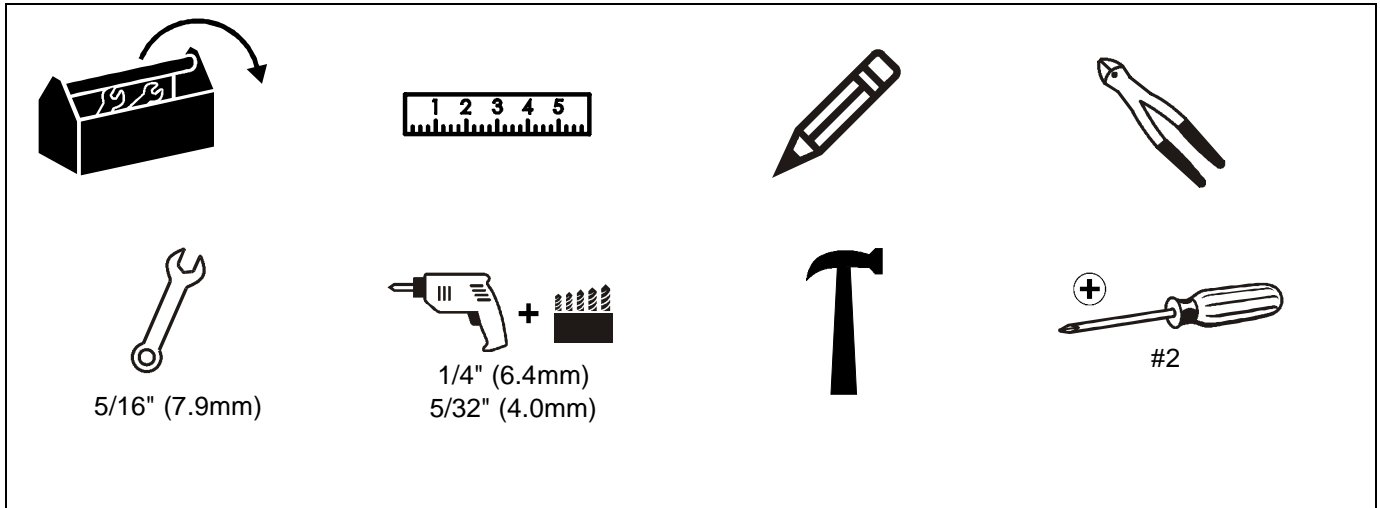
	Adjust
	Ajustar
	Einstellen
	Ajustar
	Regolare
	Afstellen
Ajuster	

	Optional
	Opcional
	Optional
	Opcional
	Opzionale
	Optie
En option	

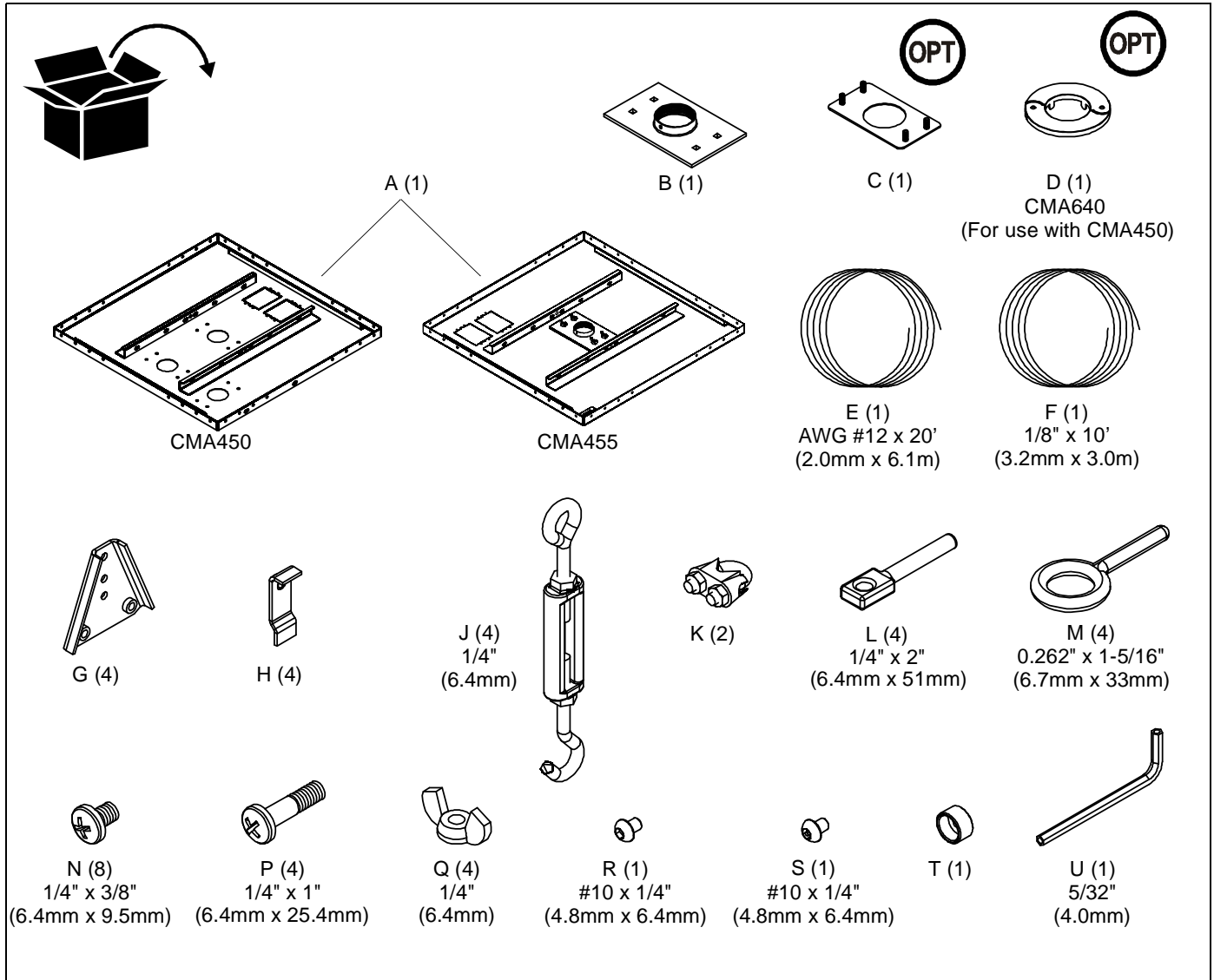
	Security Wrench
	Llave de seguridad
	Sicherheitsschlüssel
	Chave de segurança
	Chiave di sicurezza
	Veiligheidssleutel
Clé de sécurité	

	Open-Ended Wrench
	Llave de boca
	Gabelschlüssel
	Chave de bocas
	Chiave a punte aperte
	Steeksleutel
Clé à fourche	

TOOLS REQUIRED FOR INSTALLATION



PARTS



SITE PREPARATION / ASSEMBLY

The CMA450 and CMA455 are nearly identical except for the following items:

- The CMA450 is designed for installation *on top of* an existing suspended ceiling tile, while the CMA455 may either be installed on top of or replace an existing tile.
- The CMA450 can accommodate any one of 9 extension column locations (column not included) (See Figure 1), while the CMA455 can only accommodate a single column location (center).
- The CMA450 is shipped with the upper and lower extension column supports (B, C) unassembled, while the CMA455 is shipped with center column support pre-assembled.

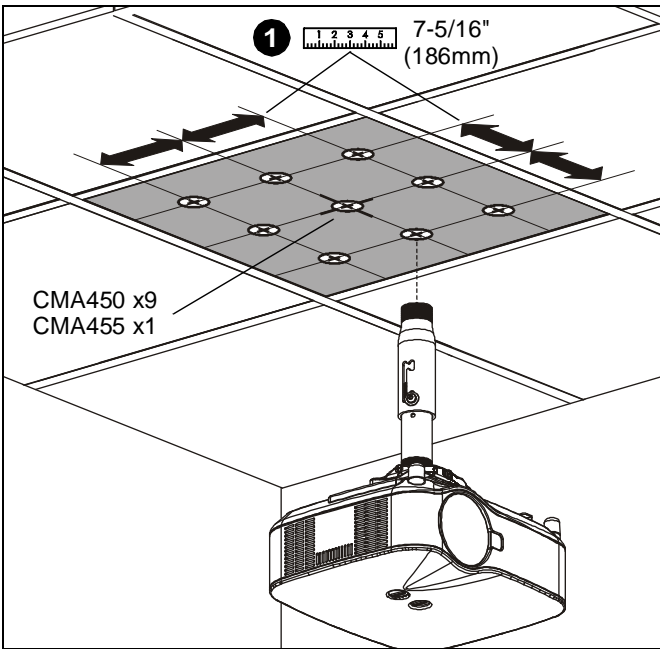


Figure 1

1. Select the best mounting location based upon the following items (See Figure 2):
 - Dimensional offset of display/projector relative to column (due to mount and/or interface).
 - For Projectors: Any recommended dimensions of projector relative to target (See installation instructions included with the projector).

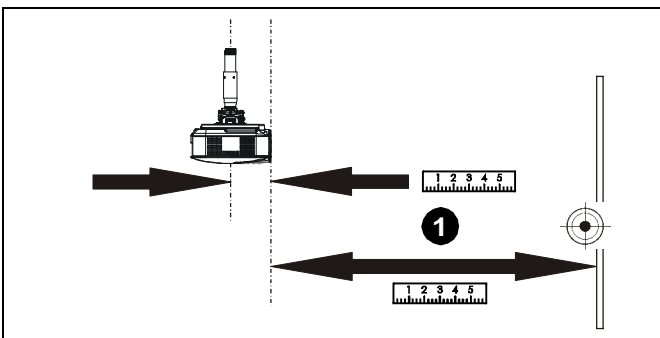


Figure 2

2. CMA450 ONLY: Assemble extension column upper support (B) and lower support (C) to center, side, or corner of tray (A) (as required) with wing nuts (Q) (See Figure 3).

NOTE: Side installation shown; center and corner installation similar.

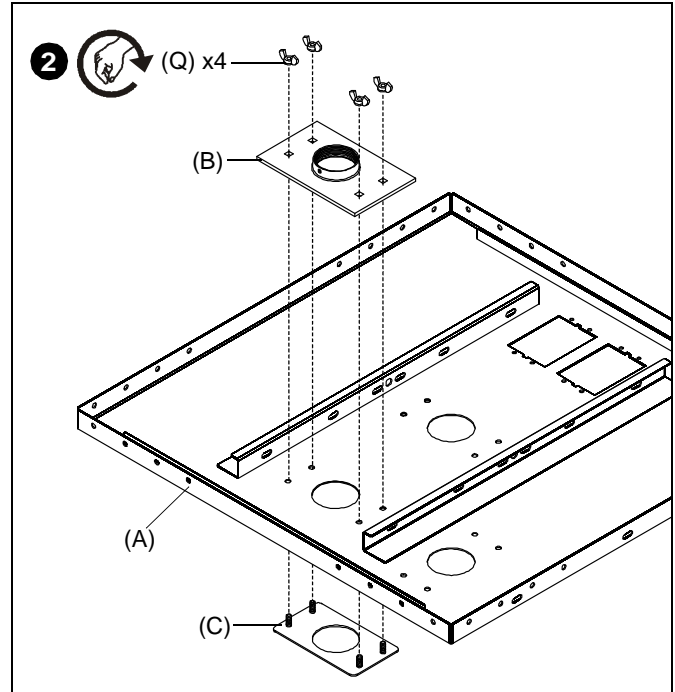


Figure 3

3. Remove adjacent ceiling tiles for access. Do NOT remove tile affected by installation of extension column.
4. Lay tray (A) on top of ceiling tile so that extension column support is aligned with location noted in Step 1.
5. Each hanger bracket (G) can be installed in one of 3 locations in each corner of tray (A), dependent upon specific installation requirements. Mark locations of brackets (G) on tray (A) with pencil (See Figure 4). Ensure brackets (G) are located as follows:
 - On sides of tray (A) adjacent to primary (1-1/2" (38mm) high) rails of ceiling framework.
 - As close to corner of tray (A) as installation allows.

NOTE: CMA450 shown; CMA455 similar.

6. FOR INSTALLATION ON TOP OF EXISTING TILE: Mark the following locations on ceiling tile with pencil (See Figure 4):
 - A. Extension column hole
 - B. OPTIONAL: Electrical cutout

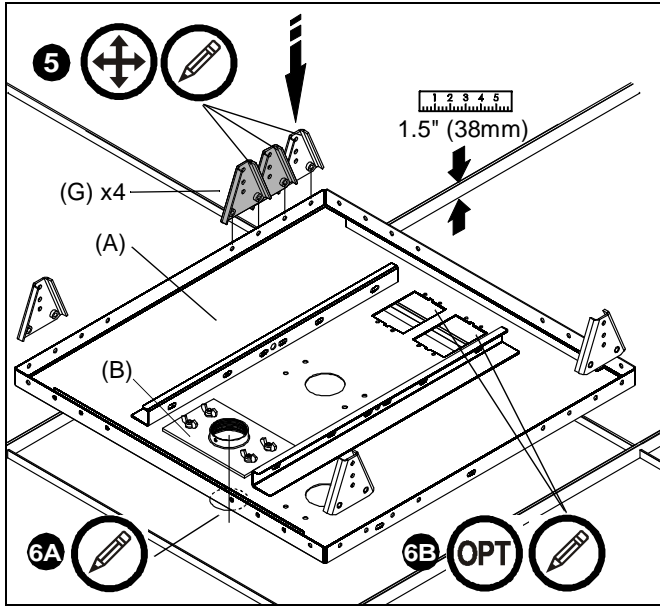


Figure 4

7. Examine ceiling structure (concrete, steel truss, or wood) above tray (A) to identify the following (See Figure 5):
 - Four support wire anchor locations, each approximately 15° outboard of corresponding hanger bracket (G). Mark locations with pencil.
 - One safety cable anchor location directly above center of tray (A). Mark location with pencil.

NOTE: Hanger brackets (G) and turnbuckles (J) are installed later; they are shown in Figure 5 for reference only.

NOTE: CMA450 shown; CMA455 similar.

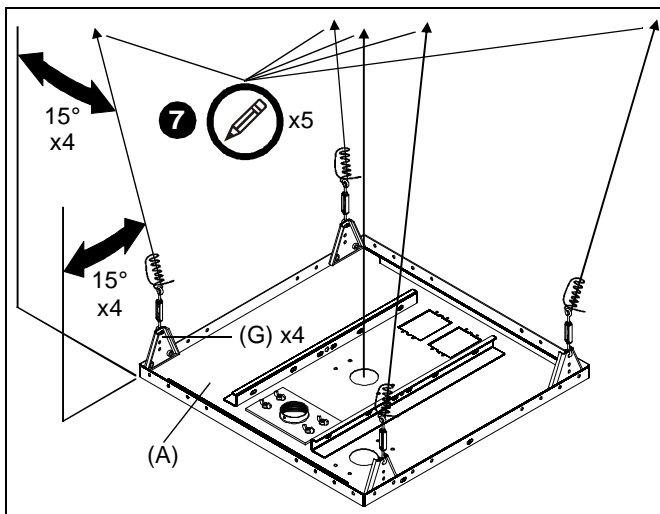


Figure 5

8. Remove tray (A) and affected ceiling tile.
9. FOR INSTALLATION ON TOP OF EXISTING TILE:
 - A. Cut extension column hole in tile at marked location,

2" (51mm) minimum diameter.

- B. OPTIONAL: Cut electrical box opening in tile at marked location. Install box to tray (A).

NOTE: Electrical box and attach hardware not included.

10. Install hanger brackets (G) to tray (A) with screws (N) at marked locations (See Figure 6). Ensure brackets (G) are installed against *inside* flanges of tray (A). Tighten screws.

NOTE: Some installations may require that one or more brackets (G) be installed *after* tray (A) is in positioned in suspended ceiling framework.

NOTE: CMA450 shown; CMA455 similar.

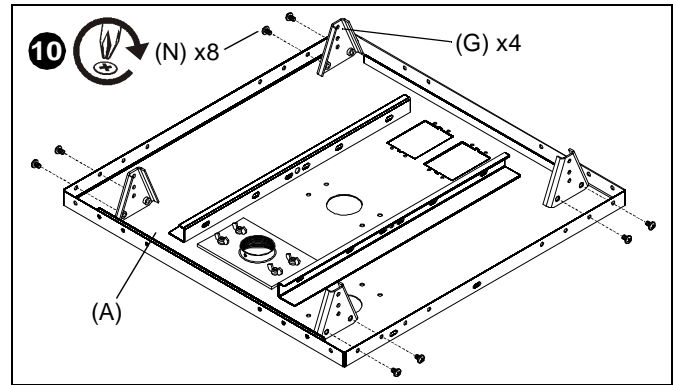


Figure 6

11. Loosely install ceiling framework clamps (H) to hanger brackets (G) with screws (P) (See Figure 7).

- FOR INSTALLATION ON TOP OF EXISTING TILE: Use *lower* hole on bracket (G).
- FOR REPLACEMENT OF EXISTING TILE: Use *middle* hole on bracket (G).

NOTE: Top hole reserved for installation of turnbuckle (J).

NOTE: CMA450 shown; CMA455 similar.

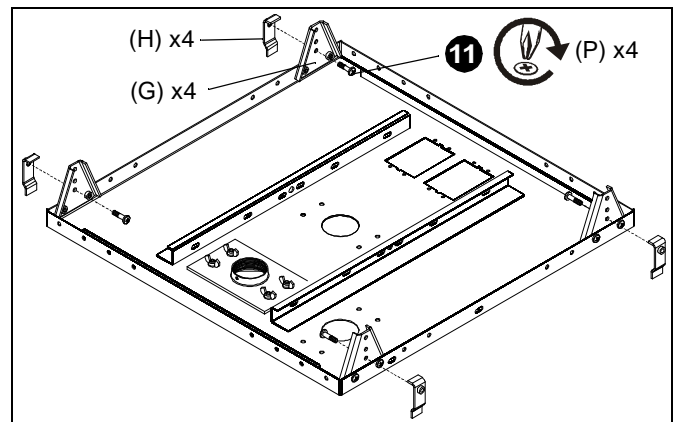


Figure 7

12. Cut support wire (E) into 4 pieces of equal length.

NOTE: Ceiling structure more than 3' (9m) above tray (A) will require additional #12 annealed steel wire.

SUPPORT WIRE INSTALLATION



WARNING: Failure to provide adequate structural strength for this component can result in serious personal injury or damage to equipment! It is the installer's responsibility to make sure the structure to which this component is attached can support five times the combined weight of all equipment. Reinforce the structure as required before installing the component.

Solid Concrete Ceiling Structure



WARNING: Anchors must be installed into structurally sound solid concrete. Installation into hollow concrete block, mortar, or concrete that exhibits cracking, spalling, or other defects may result in failure of anchor and serious personal injury or damage to equipment!

1. Drill 1/4" (6.4mm) diameter x 1-3/8" (35mm) deep hole at each marked wire anchor support location (See Figure 8). Ensure hole is at least 2-1/2" (64mm) from nearest concrete edge. Remove debris from hole.

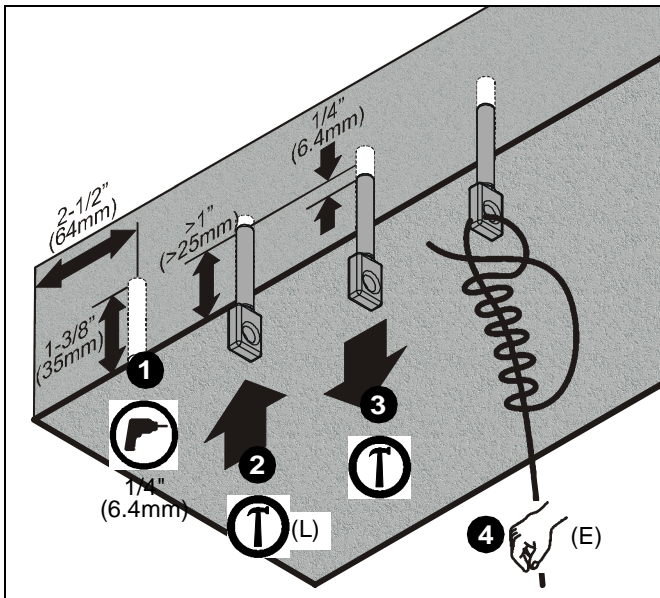


Figure 8

2. Tap anchor (D) into each hole to a depth of at least 1" (25mm) (See Figure 8).



WARNING: Failure to properly set anchor may result in failure of anchor and serious personal injury or damage to equipment!

3. Using claw portion of hammer, set each anchor (D) by pulling it out of hole approximately 1/4" (6.4mm) (See Figure 8).
4. Insert support wire (E) through hole in anchor. Twist wire tightly around itself at least 4 complete turns, and then thread loose end between anchor and first turn (See Figure 8). Repeat for 3 remaining support locations.

Steel Truss Ceiling Structure

1. Route end of support wire (E) over truss at marked wire anchor support location. Twist wire tightly around itself at least 4 complete turns, and then thread loose end between truss and first turn (See Figure 9). Repeat for 3 remaining support locations

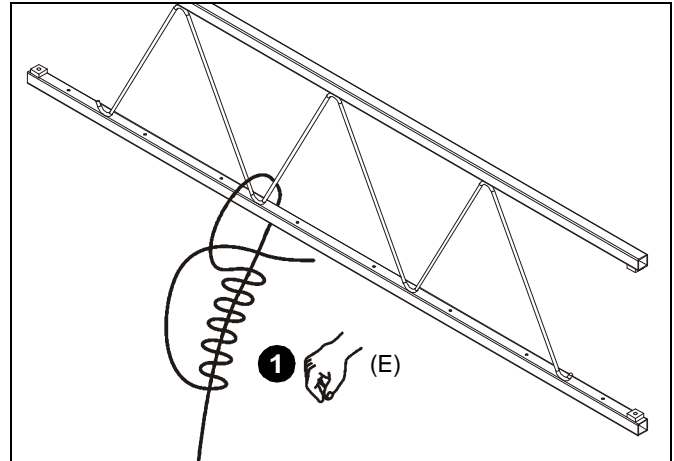


Figure 9

Wood Ceiling Structure

1. Drill 5/32" (4.0mm) diameter x 2" (51mm) deep hole at each marked wire anchor support location (See Figure 10). Remove debris from hole.

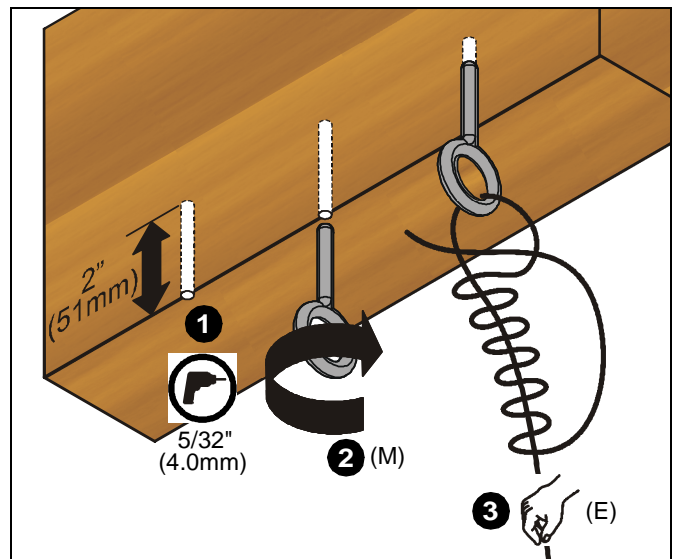


Figure 10

2. Fully thread eye lag (E) into each hole (See Figure 10).
3. Insert support wire (E) through eye in lag. Twist wire tightly around itself at least 4 complete turns, and then thread loose end between eye and first turn (See Figure 10). Repeat for 3 remaining support locations.

TRAY INSTALLATION

1. Reinstall ceiling tile (if applicable) and tray (A). Ensure proper orientation for location of hole.
2. Slip clamps over primary (1-1/2" (38mm) high) rails of ceiling framework (See Figure 11). Tighten screws (P).

NOTE: CMA450 shown; CMA455 similar.

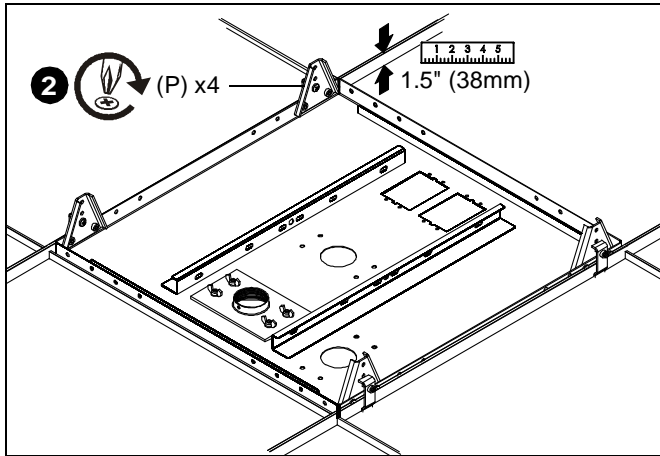


Figure 11

3. Adjust hooks and eyes on turnbuckles (J) so that approximately 1/4-1/2" (6.4-12.7mm) of threads show on *inside* of turnbuckles (See Figure 12).

NOTE: CMA450 shown; CMA455 similar.

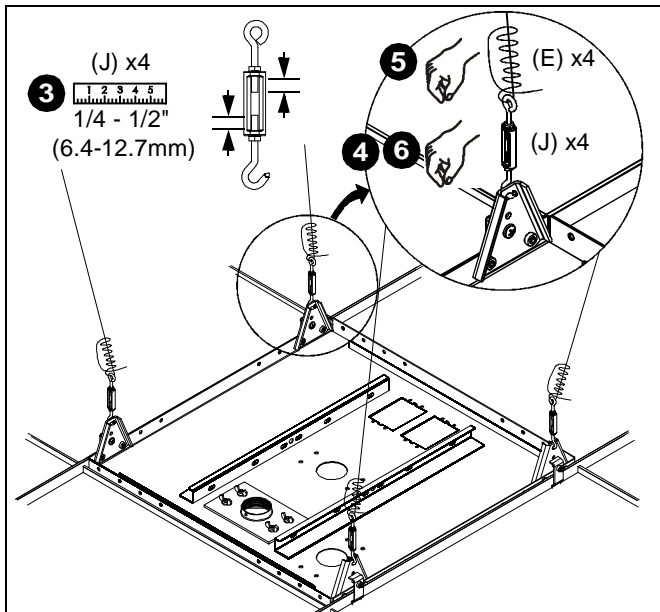


Figure 12

4. Attach the hook end of each turnbuckle (J) to the corresponding hanger bracket (G) upper hole (See Figure 12).
5. Insert corresponding hanging wire (E) through eye in turnbuckle (J). Pull wire tight and twist back around itself at

least 4 complete turns, then thread loose end between eye and first turn (See Figure 12). Repeat for 3 remaining turnbuckles (J).



CAUTION: Failure to properly tension cables (C) may result in damage to ceiling tile framework!

6. Adjust turnbuckles (J) until tray (A) is supported *entirely and evenly* by all four support wires (E), but not so tight as to distort suspended ceiling framework (See Figure 12).

SAFETY CABLE INSTALLATION

1. Attach safety cable (F) to steel truss ceiling structure at marked location.

NOTE: If no suitable steel truss structure exists, install concrete anchor or wood eye lag as required (hardware not included) per manufacturer's installation instructions.

NOTE: CMA450 shown; CMA455 similar.

- A. For ceiling structure less than 4' (1.2m) from ceiling tray (A) (See Figure 13):
 - Attach one end of cable (F) to channel in tray (A). Secure with clamp (K).
 - Route opposite end of cable (F) over truss, and attach to opposite channel in tray (A). Remove cable slack and secure with clamp (K).
- B. For ceiling structure from 4 - 7' (1.2 - 2.1m) from ceiling tray (A) (See Figure 14):
 - Route one end of cable (F) over truss and secure to itself with clamp (K).
 - Route opposite end of cable (F) through *both* channels in tray (A). Remove cable slack and secure to itself with clamp (K).
- C. For ceiling structure more than 7' above tray (A):
 - Additional 1/8" diameter steel safety cable will be required.
 - Attach cable to tray (A) per step 1.A. or 1.B. above.

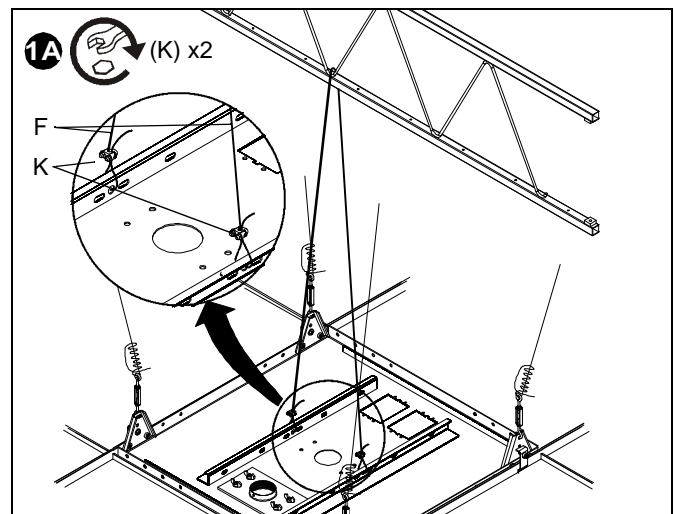


Figure 13

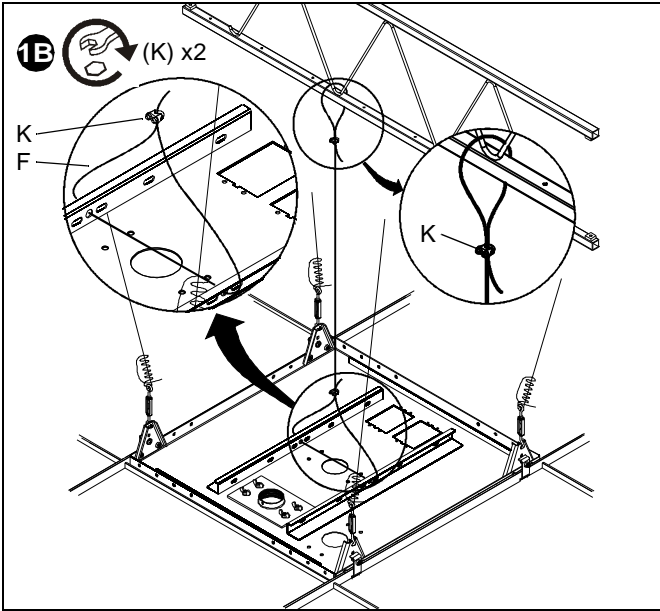


Figure 14

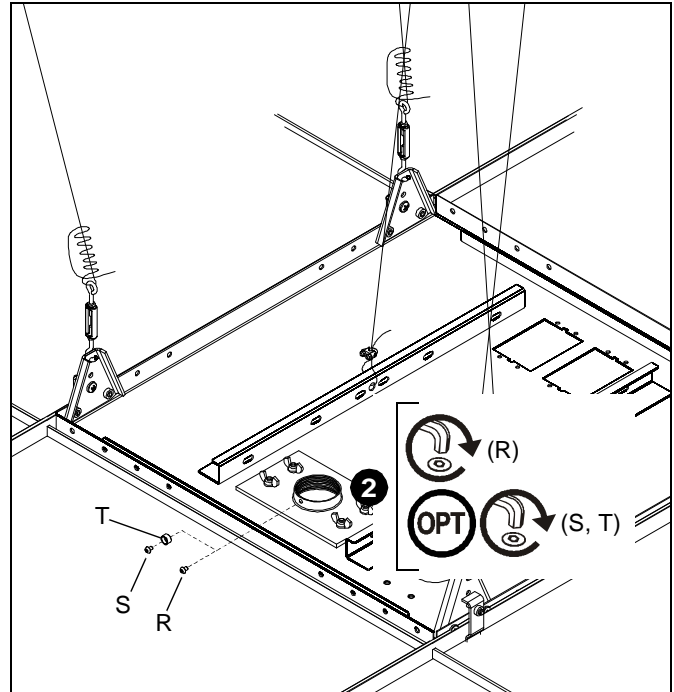


Figure 15

EXTENSION COLUMN INSTALLATION

WARNING: Exceeding the weight capacity can result in serious personal injury or damage to equipment! It is the installer's responsibility to make sure the combined weight of all components attached to the CMA450/455 does not exceed the following:

- **CMA450:** Extension column installation to *center* hole: 250 lbs (113 kg)
- **CMA450:** Extension column installation to *side or corner* hole: 125 lbs (56 kg)
- **CMA455:** 250 lbs (113 kg)

1. Install the extension column (accessory not included) to the extension column support. See installation instructions included with the accessory.

NOTE: If installation instructions are not available, contact Chief Manufacturing for assistance.

2. Using hex key (U), secure extension column by *one* of the following methods (See Figure 15):

- Install screw (R) into extension column support, tightening firmly against column.
- **OPTIONAL:** Install security screw (S) through locking collar (T) into extension column support, tightening firmly against column.

NOTE: Locking collar (T) is designed to spin, even when screw (S) is tight.

NOTE: CMA450 shown; CMA455 similar.

3. **CMA450 ONLY:** Install finishing ring (D) to extension column below ceiling tile (See Figure 16). If necessary, bend four tabs inward to secure ring to column.

NOTE: CMA640 finishing ring is used, if desired, when the CMA450 is installed above an existing tile.

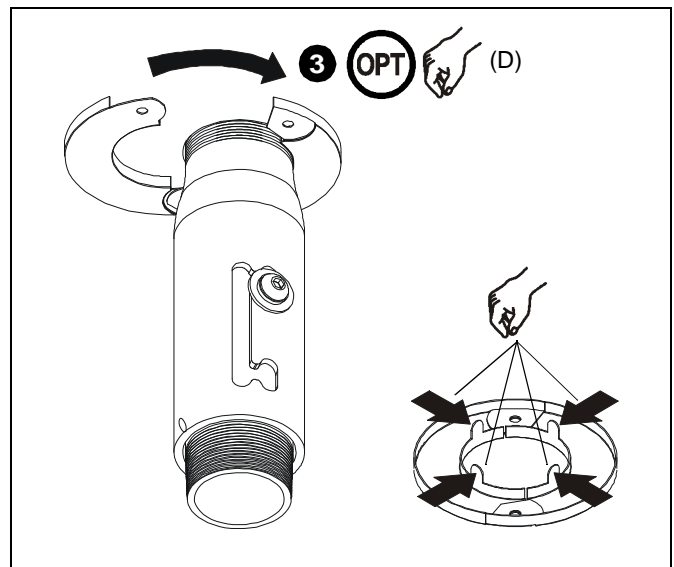


Figure 16

4. Reinstall remaining ceiling tiles as required.



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