
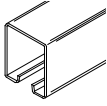

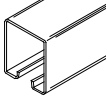

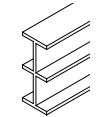

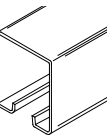

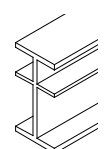

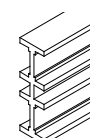

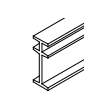

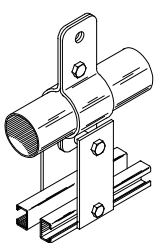





CURTAIN TRACK SELECTION GUIDE

Model No.	Cross Section	Isometric View	Recommended Working Load ^{1,2}	Carrier Length ³	Estimated Shipping Weight	Usage	Page No.
			per carrier	inches	lb/ft		
101 116	 1-3/4"W x 2"H		3 5	1-3/16 1-5/16	2.5	Standard-duty straight track for curtains up to 40 feet. Can be walk-along or cord operated.	6-9
201 221 228	 1-3/4"W x 2"H		5 4 10	1-3/4 1-1/4 1-3/4	3	Black finished, medium-duty straight track for curtains up to 48 feet. Can be walk-along or cord operated.	10-15
301 316 328	 1"W x 2-1/2"H		5 7 7	1-5/16	2	Standard-duty curved or straight track for curtains up to 60 feet. Can be walk-along or cord operated. Cord operated tracks cannot be reverse curved. Ideal for TV studios or stage use.	16-23
401 416 418 428	 2-5/8"W x 2-3/4"H		6 25 25 15	1-5/8 2-1/16 2-1/16 2-1/16	4.5	Model 401 straight track for curtains up to 60 feet. Can be walk-along or cord operated. Model Nos. 416, 418, and 428 for curtains of almost any length.	24-33
501 516	 1-5/8"W x 3-1/4"H		25 25	2-1/4	4.5	Heavy-duty curved or straight track for curtains of almost any length. Can be reverse curved for walk-along or cord operated use. Ideal for TV studios, stage, and auditorium dividers.	34-38
601 616 628	 1"W x 3-3/8"H		5 7 7	1-5/16	2	Medium-duty curved or straight track for curtains up to 60 feet. Walk-along or cord operated. Cord operated tracks cannot be reversed curved.	39-43
701 716 728	 5/8"W x 1-11/16"H		2 4 4	1-1/16	1	Light-duty curved or straight track for curtains up to 40 feet. Walk-along use only.	44-45
818			25	2-1/8	9	Heavy-duty curved or straight open style track for TV studios. Available in single and double configurations for walk-along use only.	46
1018	 3-1/4"W x 9-3/8"H		25	2-1/4	10	Heavy-duty, exceptionally quiet open style straight track for professional theatre and TV studio use. Cord operated only.	47-49

1. Recommended working load per carrier for cord operated tracks. Total weight of drapery, track length, and model used will determine ease of operation of the track system. Curtain weight per carrier is based upon a typical spacing of 12" on center across the top of the curtain.
2. Hanger spacing dependent on carrier load, see page 4 for recommendations. Track hangers must be supported from overhead structure by appropriate means.
3. Per carrier. To determine stacking space, see explanation page 3.



ORDERING COMPLETE TRACKS

Individual bi-parting, one-way, or walk-along curtain tracks can be ordered on an even per-foot basis and supplied with components for normal operation. Model numbers for COMPLETE tracks are indicated by the model number of the carrier supplied with a suffix to further describe construction of the track. Note: COMPLETE tracks do not include hardware to attach hangers or floor block to building structure.

Example: Model No. 401S COMPLETE indicates use of No. 401 Single Carrier, No. 402 Master Carrier, and No. 410S steel track.

If a 40 foot No. 401S COMPLETE curtain track is required for manually operated bi-parting curtains 20 feet high, you would order the following:

40 feet No. 401S COMPLETE, 20 feet high.

Components for this track would include the following:

- 40 each No. 401 Single Carrier
- 1 pair No. 402 Master Carrier
- 1 each No. 403 Double End Pulley
- 1 each No. 404 Single End Pulley
- 1 set No. 405 Overlap Clamp
- 8 pair No. 406 Clamp Hanger
- 1 each No. 408 Adjustable Floor Block
- 1 pair No. 409 End Stop & Cord Support
- 2 pieces No. 410S-20 Track
- 120 feet No. 414 Operating Line
(Quantity of line = 2 times track length + 2 times curtain height)

Note: Bi-parting curtain tracks are usually installed with a center overlap of 2 feet. Thus, a 40 foot COMPLETE track would have an overall length of 38 feet once installed.

SUFFIX LEGEND:

- A- Aluminum
- B- Black
- C- Curved
- P- Premier
- S- Steel (or Straight for 500 Series)
- W- Walk-Along

DETERMINING STACKING SPACE

Stacking space required for any curtain is determined by many variables. These include fabric type, added fullness, and linings, if any. The carrier length will most often be the governing factor on light to medium weight curtains. Heavyweight and lined curtains require additional stacking space to accommodate the density of the fabric(s). A stacking space estimator is available on our website, www.hhspecialties.com, under the resources tab.

To determine minimum stacking space required for the hardware:

1. Length of master carrier
(from dimensioned drawings in each track section)
2. Length of end pulley
(from dimensioned drawings in each track section)
3. Total carrier length.
(qty. of carriers x carrier length from chart on page 2)
4. Total of Item Nos. 1-3 and add 10%.

EXAMPLE

Model 401S COMPLETE x 40 feet, bi-parting traveler. Estimate stacking space required for each half of track.

1. Length of Master Carrier: 4-3/8"
2. Length of End Pulley: 4-1/4"
3. Length of Each Carrier: 1-5/8"
20 carriers X 1-5/8" = 32-1/2"
4. Total: 4-3/8" + 4-1/4" + 32-1/2" = 41-1/8". Add 10% = 45-1/4" total stacking space per each half.

The 10% additional value calculated into the stacking space is considered an industry average. The value computed is the stacking space required for the track hardware. Heavy curtains and curtains with linings may require additional stacking space for the curtains themselves. Allowances should be made for those conditions. Consult your curtain supplier for additional information.

Note: The addition of rear fold guides (Series 100, 200, and 400) requires an extra 1/4" stacking space per carrier.



Curtain Weight Per Carrier (pounds)	RECOMMENDED TRACK HANGER SPACING (in Feet)										
	110A	110S	210B	310	410A	410S	510	610	710	810	1010
2	6	8	7.5	4.5	8	10	6	5	2.5	4	6
3	6	8	7.5	4	8	10	6	5	2	4	6
4	5.5	6.5	6.5	3.8	8	10	6	4.5	2	4	6
5	5	5.5	6.5	3.5	8	10	6	4.3	-	4	6
6	-	-	6.5	3.3	8	10	6	4.25	-	4	6
7	-	-	6	3.3	7	8	6	4	-	4	6
10	-	-	4	-	7	8	5.75	-	-	4	6
15	-	-	-	-	5.5	5.5	5	-	-	4	6
20	-	-	-	-	4	4	3.8	-	-	4	6
25	-	-	-	-	3.25	3.5	3.1	-	-	4	6

NOTES TO THE VALUES LISTED ON THIS CHART

- Note:** Recommended spacing of hangers is based upon the worst-case condition; curtains in the open or storage position based upon the various curtain weight per track listed. In this condition, the load subjected on the track and its associated hanging hardware is substantial. It is the customer's responsibility to determine the weight of the curtain to be supported by our track and determine the proper support spacing required. For curved tracks, additional hangers are required to stabilize the tracks. Consult the factory for curved applications.
- Curtain weight per carrier is based upon typical carrier spacing of 12" on center across the top of the curtain.
- The analysis of the curtain track and components presented in this chart is based upon generally accepted principles of structural engineering and the following specific analysis design guides:
 Aluminum Association, Aluminum Design Manual, 2005.
 American Iron & Steel Institute, North American Specification for the Design of Cold-Formed Steel Structural Members, 2007 Edition.
 All calculations are based upon a continuously supported span. Deflection criteria is based upon span/240.
- The values listed are based upon applications involving curtains only. Scenery carriers are available for several of our tracks. Consult the factory for your specific application when using scenery carriers. Scenery carriers may be found on page 54. **WARNING:** Do not use curtain track master carriers for supporting scenery.
- Recommended hanger spacing for 300 and 600 Series Tracks is based upon use of 306 or 606 Clamp Hanger. Consult factory when using ceiling hangers.
- Direct ceiling attachment of tracks (100, 200 and 400 Series) has not been evaluated as the support structure, method of attachment, and attachment requirements may vary widely from project to project. A qualified person should be consulted for this application.
- All recommendations stated are presented in good faith and based upon generally accepted engineering principles. The user, however, is cautioned that H & H Specialties Inc. cannot guarantee the accuracy of the data presented in this table for every situation. It is the customer's responsibility to determine the suitability of H & H Specialties' products for any given application, taking into account the specific requirements, the environment of use, and any possible peculiarities of the application.



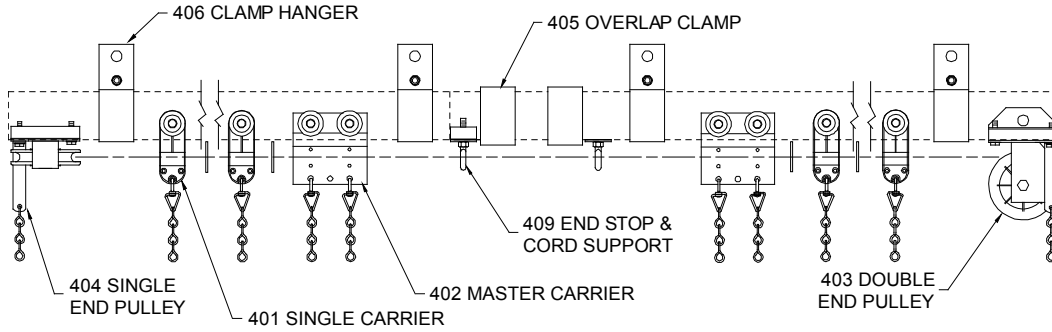
400 SERIES HEAVY-DUTY STRAIGHT TRACK

COMPLETE TRACK MODEL NUMBERS

401A	401S	401W
416A	416S	416P
416W	418A	418S
418P	418W	428A
428S	428W	

BLACK COMPLETE TRACK MODEL NUMBERS

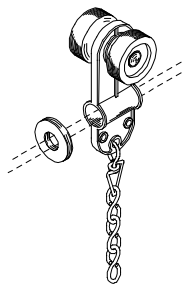
401SB	401WB
416SB	416PB
416WB	418SB
418PB	418WB
428SB	428WB



The 400 Series is a straight track offered in many models for a variety of project requirements. This heavy-duty track is available in galvanized steel, black powder-coated steel and mill finish aluminum. In addition to the traditional zinc plated finish, all hardware items are available in black finish to meet the demands of the theatrical industry.

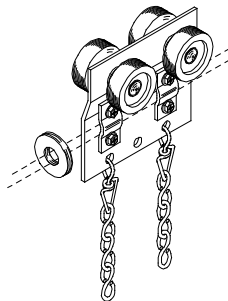
Model 401S is recommended for moderately heavy curtains up to 60 feet in width. It utilizes ball bearing carriers with polyethylene wheels and 4" end pulleys. Model 428S is an economical upgrade to urethane wheels and 6" pulleys when a quiet track is desired for larger curtains.

Models 416S and 418S feature improved carriers with a custom designed, sealed ball bearing in each wheel. The 416 carrier is equipped with nylon-tired wheels for minimized friction when moving heavy loads. The 418 carrier has been redesigned with a urethane tire that combines durability with quiet operation. Each is complemented by 6" end pulleys for rigging curtains of virtually any length. The Premier versions, Models 416P and 418P, are the best in heavy-duty straight tracks. They incorporate 1/2" operating line, rear fold guides and 8" end pulleys for maximum ease of operation of very heavy stage curtains.



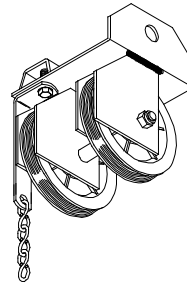
SINGLE CARRIER

2 polyethylene wheels riveted to black Super Tough nylon body with shielded ball bearing. Heavy-duty hook, swivel, and trim chain for curtain attachment. Supplied with 1 No. 431 rubber bumper. **No. 401** - Zinc plated. **No. 401B** - Black finish.



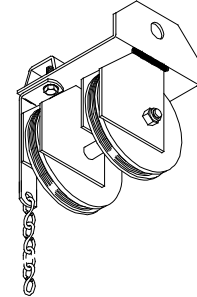
MASTER CARRIER

4 polyethylene wheels riveted to steel body with 2 shielded ball bearings. 2 clamps provided for anchoring operating line or cable. Supplied with 1 No. 431 rubber bumper. 1 pair required for overlapping tracks. **No. 402** - Zinc plated. **No. 402B** - Black finish.



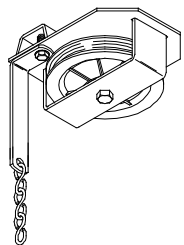
DOUBLE END PULLEY

4" diameter Nylatron GS sheaves with shielded ball bearings. Steel housing clamps to underside of track. Chain bracket for securing offstage curtain edge. 3/8" groove. **No. 403** - Zinc plated. **No. 403B** - Black finish.



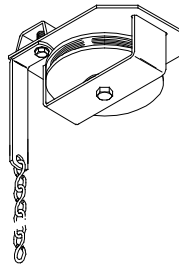
No. 403M BLACK DOUBLE END PULLEY

Heavy-duty 4" diameter Nylatron GSM sheaves with sealed precision ball bearings. Steel housing clamps to underside of track. Chain bracket for securing offstage curtain edge. 3/16" groove for use with motorized tracks.



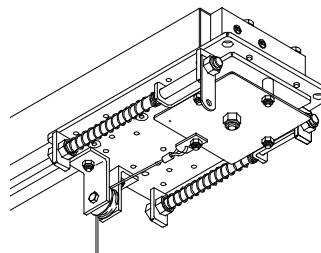
SINGLE END PULLEY

4" diameter Nylatron GS sheave with shielded ball bearing. Steel housing clamps to underside of track. Chain bracket for securing offstage curtain edge. 3/8" groove. **No. 404** - Zinc plated. **No. 404B** - Black finish.



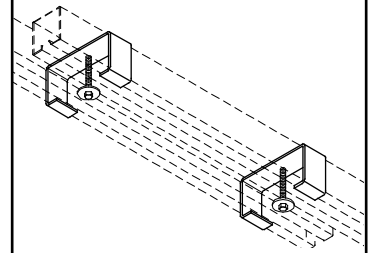
No. 404M BLACK SINGLE END PULLEY

Heavy-duty 4" diameter Nylatron sheave with sealed precision ball bearings. Steel housing clamps to underside of track. Chain bracket for securing offstage curtain edge. 3/16" groove for use with motorized tracks.



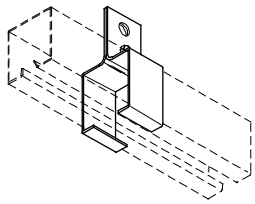
No. 404T BLACK TENSIONING END PULLEY

4" diameter Nylatron GSM sheave with sealed precision ball bearings grooved for 3/16" cable. Heavy-duty steel housing clamps to underside of track and provides constant cable tension on large motorized tracks.



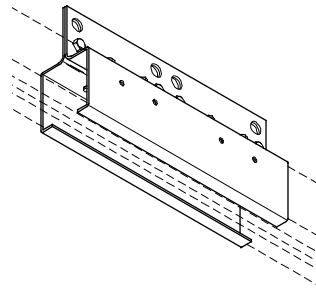
OVERLAP CLAMP

Formed steel clamps to align track at overlap. 1 set pictured. **No. 405** - Zinc plated. **No. 405B** - Black finish.



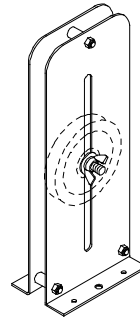
CLAMP HANGER

Formed steel brackets clamp to track. Adjusts to any position. Suspend track with welded chain or wire rope. 1 pair pictured.
NO. 406 - Zinc plated.
NO. 406B - Black finish.



SPLICE

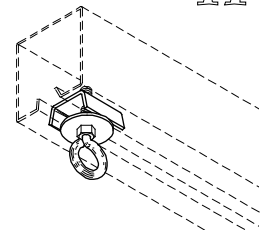
Formed steel brackets align and lock track sections together. 1 pair pictured.
NO. 407 - Zinc plated.
NO. 407B - Black finish.



No. 408 BLACK

ADJUSTABLE FLOOR BLOCK

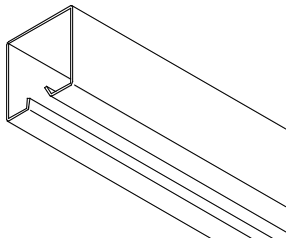
4" diameter Nylatron GS sheave with shielded ball bearing in steel housing. 9" vertical adjustment.



END STOP & CORD SUPPORT

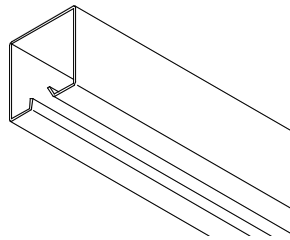
Steel clamp with eye to support operating line and prevent carriers from traveling beyond desired location. 1 pair required for overlapping tracks. **DO NOT USE WITH PIVOT DEVICES.**

No. 409 - Zinc plated.
No. 409B - Black finish.



No. 410A TRACK

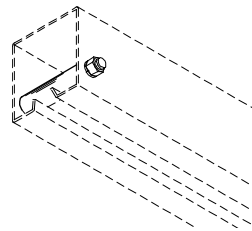
Mill finish 6063-T5 extruded aluminum 2-5/8" wide x 2-3/4" high, .080" thick. 20' and 24' stock lengths.



No. 410S TRACK

14 gauge galvanized steel, roll-formed to 2-5/8" wide x 2-3/4" high.

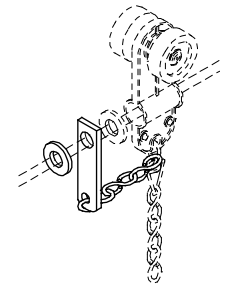
No. 410S- 16', 20', 24', and 26' stock lengths.
No.410S-B- Semi-gloss black powder coat finish. 16', 20', and 24' stock lengths.



END STOP

Bolt with steel spacer to prevent carriers from traveling beyond desired location. For use with walk-along tracks and tracks with pivot devices.

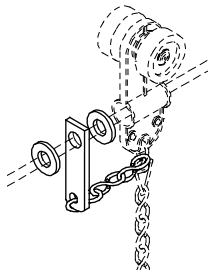
No. 411 - Zinc plated.
No. 411B - Black finish.



REAR FOLD GUIDE

Allows curtain to fold at offstage edges. Supplied with 1 No. 431 rubber bumper.

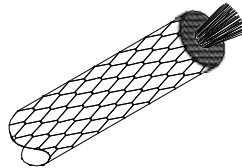
No. 412 - for use with 3/8" operating line.
No. 412B - same as 412 in Black



REAR FOLD GUIDE

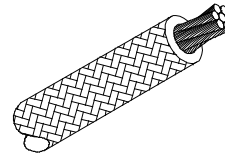
Allows curtain to fold at offstage edges. Supplied with 2 rubber bumpers.

No. 412A - for use with 1/2" operating line. Black finish.
No. 413 - for use with 3/16" operating cable.
No. 413B - same as 413 in Black



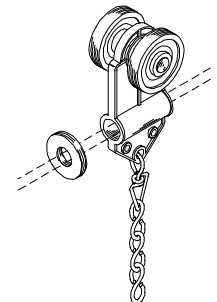
No. 414 OPERATING LINE

3/8" diameter black polyester braided over Dyneema core for manual operation.



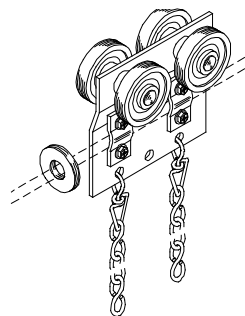
No. 415 OPERATING CABLE

3/16" diameter black polyester jacket braided over 3/32" specialty cord wire rope. For use with motorized tracks.



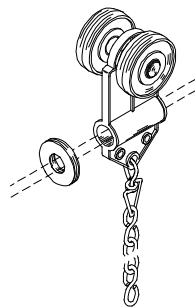
No. 416 BLACK SINGLE CARRIER

2 nylon-tired sealed ball bearing wheels riveted to black Super Tough nylon body with heavy-duty hook, swivel and 6" trim chain for curtain attachment. Supplied with 1 No. 431 rubber bumper.



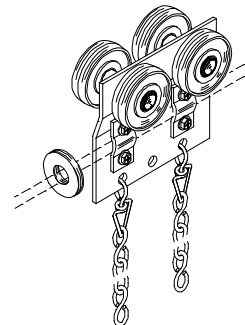
No. 417 BLACK MASTER CARRIER

4 nylon-tired sealed ball bearing wheels riveted to steel body. 2 clamps provided for anchoring operating line or cable. Supplied with 1 No. 431 rubber bumper. 1 pair required for overlapping tracks.



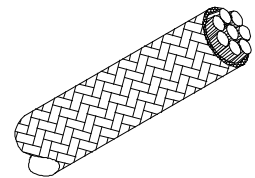
No. 418 BLACK SINGLE CARRIER

2 urethane-tired sealed ball bearing wheels riveted to black Super Tough nylon body with heavy-duty hook, swivel and 6" trim chain for curtain attachment. Supplied with 1 No. 431 rubber bumper.



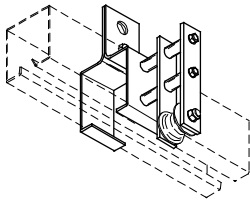
No. 419 BLACK MASTER CARRIER

4 urethane-tired sealed ball bearing wheels riveted to steel body. 2 clamps provided for anchoring operating line or cable. Supplied with 1 No. 431 rubber bumper. 1 pair required for overlapping tracks.



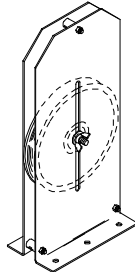
No. 420 OPERATING LINE

1/2" diameter black spun polyester braided over polyester core for manual operation.

**CLAMP HANGER WITH IDLER**

No. 406 clamp hanger with Nylatron GS ball bearing roller for supporting operating line or cable.

No. 421 - Zinc plated.
No. 421B - Black finish.

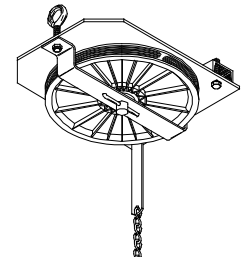
**No. 422, BLACK 8"****ADJUSTABLE FLOOR BLOCK**

8" diameter Nylatron GS sheave with sealed precision ball bearings in heavy-duty steel housing with 9" vertical adjustment. Grooved to accept up to 1/2" operating line.

BLACK 8" DOUBLE END PULLEY

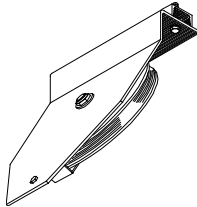
8" diameter Nylatron GS sheaves with sealed precision ball bearings. Heavy-duty steel housing with clamps to underside of track. Chain bracket for securing offstage curtain edge.

No. 423 - Grooved for up to 1/2" operating line.
No. 423M - Grooved for 3/16" operating cable.

**BLACK 8" SINGLE END PULLEY**

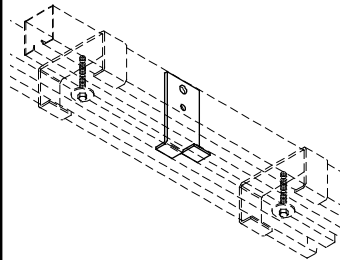
8" diameter Nylatron GS sheave with sealed precision ball bearings. Heavy-duty steel housing with clamps to underside of track. Chain bracket for securing offstage curtain edge.

No. 424 - Grooved for up to 1/2" operating line.
No. 424M - Grooved for 3/16" operating cable.

**BLACK 8" SLANTED SINGLE END PULLEY**

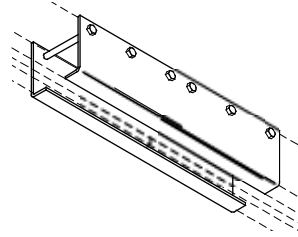
8" diameter Nylatron GS sheave with sealed precision ball bearings. Heavy-duty steel housing clamps to underside of track. Chain bracket for securing offstage curtain edge. Allows a narrower profile when installed.

No. 424A - Grooved for up to 1/2" operating line.
No. 424AM - Grooved for 3/16" operating cable.

**CENTER PIPE SUPPORT**

Formed steel bracket used to support tracks at overlap.

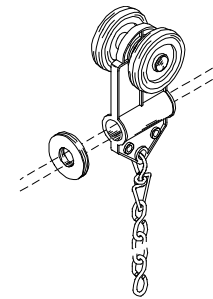
No. 426 - Zinc plated.
No. 426B - Black finish.

**CEILING SPLICE**

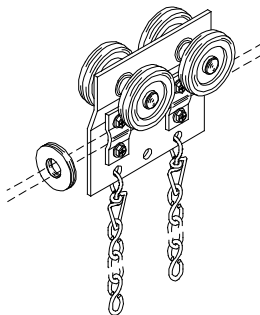
To align and lock track sections together on ceiling mounted tracks. 1 pair pictured.

Note: Cannot be used with No. 437 Locking Master or No. 40 Pivot Device due to interference with the wheels.

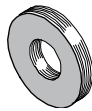
No. 427 - Zinc plated.
No. 427B - Black finish.

**No. 428 BLACK SINGLE CARRIER**

2 urethane-tired wheels riveted to black Super Tough nylon body with shielded ball bearing. Heavy-duty hook, swivel and 6" trim chain for curtain attachment. Supplied with 1 No. 431 rubber bumper.

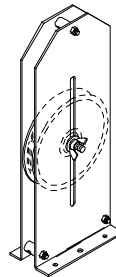
**No. 429 BLACK MASTER CARRIER**

4 urethane-tired wheels riveted to steel body with 2 shielded ball bearings. 2 clamps provided for anchoring operating line or cable. Supplied with 1 No. 431 rubber bumper. 1 pair required for overlapping tracks.

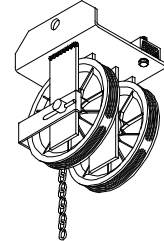
**ROUND RUBBER BUMPER**

1/8" neoprene bumper placed between carriers on operating line to reduce noise.

No. 430 - for use with 3/16" operating cable.
No. 431 - for use with 3/8" operating line.
No. 431A - for use with 1/2" operating line.

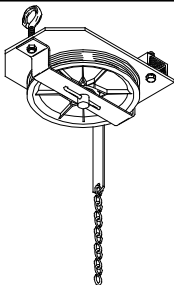
**No. 432, BLACK 6" ADJUSTABLE FLOOR BLOCK**

6" diameter Nylatron GS sheave with sealed precision ball bearings in heavy-duty steel housing with 9" vertical adjustment. Grooved to accept up to 1/2" operating line.

**6" BLACK DOUBLE END PULLEY**

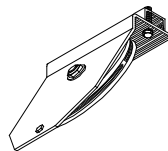
6" diameter Nylatron GS sheaves with precision sealed ball bearings. Heavy-duty steel housing with clamps to underside of track. Chain bracket for securing offstage curtain edge.

No. 433 - Grooved for up to 1/2" operating line.
No. 433M - Grooved for 3/16" operating cable.

**6" BLACK SINGLE END PULLEY**

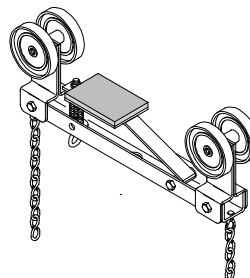
6" diameter Nylatron GS sheave with sealed precision ball bearings. Heavy-duty steel housing clamps to underside of track. Chain bracket for securing offstage curtain edge.

No. 434 - Grooved for up to 1/2" operating line.
No. 434M - Grooved for 3/16" operating cable.

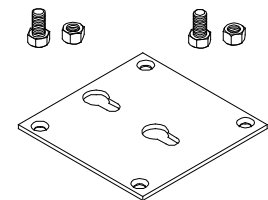
**BLACK 6" SLANTED SINGLE END PULLEY**

6" diameter Nylatron GS sheave with sealed precision ball bearings. Heavy duty steel housing clamps to underside of track. Chain bracket for securing offstage curtain edge. Allows a narrower profile when installed.

No. 434A - Grooved for up to 1/2" operating line.
No. 434AM - Grooved for 3/16" operating cable.

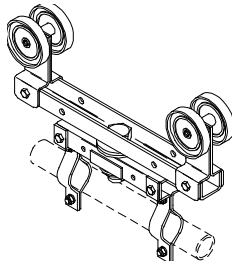
**No. 437 BLACK LOCKING MASTER CARRIER**

Heavy steel construction with nylon wheels and brake to keep master carrier in desired location. Equipped with swivels and trim chains for curtain attachment. Note: All carriers used with this device must have a trim chain of 6" total length.

**BLACK DETACHABLE FLOOR BLOCK KIT**

7 gauge steel plate with hardware for use with floor block for quick release.

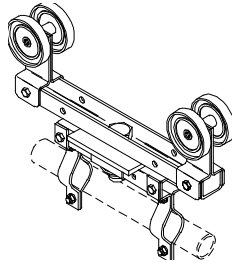
No. 408DK - use with No. 408 4" Floor Block.
No. 422DK - use with No. 422 8" Floor Block.
No. 432DK - use with No. 432 6" Floor Block.



40 PIVOT DEVICE

Heavy steel construction with nylon wheels. Supplied with brackets for 1-3/8" O.D. pipe or tubing (6' max. recommended length). Allows masking draperies to be rotated to any angle.
Working Load Limit: 60 pounds.

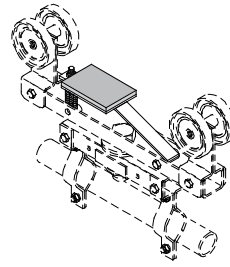
No. 40 - Zinc plated.
No. 40B - Black finish.



INDEXING PIVOT DEVICE

Pivot device with special plate to index rotation at 22-1/2 degree increments. Supplied with brackets for 1-3/8" O.D. pipe or tubing (6' max. recommended length).

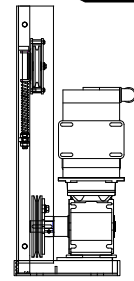
Working Load Limit: 60 pounds.
No. 40X - Zinc plated.
No. 40XB - Black finish.



BRAKE KIT

Spring equipped arm with neoprene pad. Add to pivot device to prevent undesired movement along track.

No. 40BK - Zinc plated.
No. 40BKB - Black finish.



No. 459 Curtain Machine

See pages 58-70 for curtain machines.

400 SERIES WALK-ALONG TRACK COMPONENT GUIDE

PART No.	DESCRIPTION	401W	416W	418W	428W
401	Single Carrier	•			
402	Master Carrier	•			
406	Clamp Hanger	•	•	•	•
407*	Splice	•	•	•	•
409	End Stop & Cord Support	•	•	•	•
410S*	Track	•	•	•	•
416	Black Nylon B.B. Single Carrier		•		
417	Black Nylon B.B. Master Carrier		•		
418	Black Urethane B.B. Single Carrier			•	
419	Black Urethane B.B. Master Carrier			•	
428	Black Urethane Single Carrier				•
429	Black Urethane Master Carrier				•

* Track lengths and splices supplied as required from stock sizes.

400 SERIES BLACK WALK-ALONG TRACK COMPONENT GUIDE

PART No.	DESCRIPTION	401WB	416WB	418WB	428WB
401B	Black Single Carrier	•			
402B	Black Master Carrier	•			
406B	Black Clamp Hanger	•	•	•	•
407B*	Black Splice	•	•	•	•
409B	Black End Stop & Cord Support	•	•	•	•
410S-B*	Black Track	•	•	•	•
416	Black Nylon B.B. Single Carrier		•		
417	Black Nylon B.B. Master Carrier		•		
418	Black Urethane B.B. Single Carrier			•	
419	Black Urethane B.B. Master Carrier			•	
428	Black Urethane Single Carrier				•
429	Black Urethane Master Carrier				•

* Track lengths and splices supplied as required from stock sizes.



400 SERIES COMPLETE TRACK COMPONENT GUIDE

PART No.	DESCRIPTION	401S	416S	416P	418S	418P	428S
401	Single Carrier	•					
402	Master Carrier	•					
403	4" Double End Pulley	•					
404	4" Single End Pulley	•					
405	Overlap Clamp	•	•	•	•	•	•
406	Clamp Hanger	•	•	•	•	•	•
407*	Splice	•	•	•	•	•	•
408	Black 4" Adjustable Floor Block	•					
409	End Stop & Cord Support	•	•	•	•	•	•
410S*	Track	•	•	•	•	•	•
412A	Black 1/2" Rear Fold Guide			•		•	
414	3/8" Operating Line	•	•		•		•
416	Black Nylon B.B. Single Carrier		•	•			
417	Black Nylon B.B. Master Carrier		•	•			
418	Black Urethane B.B. Single Carrier				•	•	
419	Black Urethane B.B. Master Carrier				•	•	
420	1/2" Operating Line			•		•	
421	Clamp Hanger with Idler			•		•	
422	Black 8" Adjustable Floor Block			•		•	
423	Black 8" Double End Pulley			•		•	
424	Black 8" Single End Pulley			•		•	
426	Center Pipe Support			•		•	
428	Black Urethane Single Carrier						•
429	Black Urethane Master Carrier						•
432	Black 6" Adjustable Floor Block		•		•		•
433	Black 6" Double End Pulley		•		•		•
434	Black 6" Single End Pulley		•		•		•

* Track lengths and splices supplied as required from stock sizes.

For COMPLETE tracks supplied with aluminum, substitute 410A for 410S.

400 SERIES BLACK COMPLETE TRACK COMPONENT GUIDE

Note: Aluminum track is not offered in black.

PART No.	DESCRIPTION	401SB	416SB	416PB	418SB	418PB	428SB
401B	Black Single Carrier	•					
402B	Black Master Carrier	•					
403B	Black 4" Double End Pulley	•					
404B	Black 4" Single End Pulley	•					
405B	Black Overlap Clamp	•	•	•	•	•	•
406B	Black Clamp Hanger	•	•	•	•	•	•
407B*	Black Splice	•	•	•	•	•	•
408	Black 4" Adjustable Floor Block	•					
409B	Black End Stop & Cord Support	•	•	•	•	•	•
410S-B*	Black Track	•	•	•	•	•	•
412A	Black 1/2" Rear Fold Guide			•		•	
414	3/8" Operating Line	•	•		•		•
416	Black Nylon B.B. Single Carrier		•	•			
417	Black Nylon B.B. Master Carrier		•	•			
418	Black Urethane B.B. Single Carrier				•	•	
419	Black Urethane B.B. Master Carrier				•	•	
420	1/2" Operating Line			•		•	
421B	Black Clamp Hanger with Idler			•		•	
422	Black 8" Adjustable Floor Block			•		•	
423	Black 8" Double End Pulley			•		•	
424	Black 8" Single End Pulley			•		•	
426B	Black Center Pipe Support			•		•	
428	Black Urethane Single Carrier						•
429	Black Urethane Master Carrier						•
432	Black 6" Adjustable Floor Block		•		•		•
433	Black 6" Double End Pulley		•		•		•
434	Black 6" Single End Pulley		•		•		•

* Track lengths and splices supplied as required from stock sizes.

GENERAL SPECIFICATIONS: HEAVY-DUTY STRAIGHT TRACK

Provide **Model 401S** as manufactured by H & H Specialties Inc., South El Monte, CA.

Track shall be 14 gauge galvanized steel, roll-formed to 2-5/8" wide X 2-3/4" high channel with continuous slot in bottom. Provide unspliced in lengths up to 26'.

Suspend track with two-piece clamp hanger formed from 11 gauge steel. Provide 2' overlap at center, rigidly separated by two overlap clamps. Install end stop with cord support at each track end. Where lengths exceed 26', connect tracks with 12" long, two-piece splicing clamp of 12 gauge steel.

Provide single carriers, spaced on 12" centers, constructed of two polyethylene wheels fastened parallel to carrier body. Supply with heavy-duty hook, swivel eye and 3" trim chain for attachment of curtain. Black Super Tough nylon shall be molded around shielded and greased ball bearing to form carrier body. Install round neoprene bumper between each carrier on operating line to reduce noise.

Master carriers shall be 4-wheel assemblies with bodies formed from 11 gauge steel with press-fit ball bearings. Connect to operating line with two formed steel cord clamps attached to each body. Supply each master carrier with two heavy-duty hooks, swivel eyes and 3" trim chains for attachment of leading edge of curtain.

Single and double end pulleys shall clamp securely to the underside of the track channel and shall contain 4" diameter sheaves enclosed in steel housings to prevent operating line from escaping the grooves. Sheaves shall be Nylatron GS molded around shielded and greased ball bearings and grooved to accommodate up to 3/8" operating line.

Provide floor block in 12 gauge steel housing containing 4" Nylatron GS shielded ball bearing sheave. Sheave axle shall lock at any point within 9" vertical slots to allow tension adjustment of operating line.

Black operating line shall be 3/8" diameter, stretch-resistant rope with spun polyester outer jacket braided over Dyneema core.

All steel components shall be zinc plated to resist corrosion.

Provide **Model 416S** as manufactured by H & H Specialties Inc., South El Monte, CA.

Track shall be 14 gauge galvanized steel, roll-formed to 2-5/8" wide X 2-3/4" high channel with continuous slot in bottom. Provide unspliced in lengths up to 26'.

Suspend track with two-piece clamp hanger formed from 11 gauge steel. Provide 2' overlap at center, rigidly separated by two overlap clamps. Install end stop with cord support at each track end. Where lengths exceed 26', connect tracks with 12" long, two-piece splicing clamp of 12 gauge steel.

Provide single carriers, spaced on 12" centers, constructed of two nylon-tired sealed ball bearing wheels fastened parallel to black Super Tough nylon carrier body. Supply with heavy-duty hook, swivel eye and 6" trim chain for attachment of curtain. Install round neoprene bumper between each carrier on operating line to reduce noise.

Master carriers shall be 4-wheel nylon-tired sealed ball bearing assemblies with bodies formed from 11 gauge steel. Connect to operating line with two formed steel cord clamps attached to each body. Supply each master carrier with two heavy-duty hooks, swivel eyes and 6" trim chains for attachment of leading edge of curtain.

Single and double end pulleys shall clamp securely to the underside of the track channel and shall be equipped with 6" diameter Nylatron GS sheaves grooved for up to 1/2" operating line. Install two 5/8" sealed precision ball bearings in each sheave. Lock shaft to side plate on head end with 3/16" keeper pin to prevent rotation and install fine-threaded nylon insert lock nut.

Provide floor block in 12 gauge steel housing containing 6" Nylatron sheave with two 3/8" sealed precision ball bearings. Sheave axle shall lock at any point within 9" vertical slots to allow tension adjustment of operating line.

Black operating line shall be 3/8" diameter, stretch-resistant rope with spun polyester outer jacket braided over Dyneema core.

All steel components shall be zinc plated to resist corrosion.

Provide **Model 418P** as manufactured by H & H Specialties Inc., South El Monte, CA.

Track shall be 14 gauge galvanized steel, roll-formed to 2-5/8" wide X 2-3/4" high channel with continuous slot in bottom. Provide unspliced in lengths up to 26'.

Suspend track with two-piece clamp hanger formed from 11 gauge steel. Provide 2' overlap at center, rigidly separated by two overlap clamps. Install end stop with cord support at each track end. Where lengths exceed 26', connect tracks with 12" long, two-piece splicing clamp of 12 gauge steel.

Provide single carriers, spaced on 12" centers, constructed of two urethane-tired sealed ball bearing wheels fastened parallel to black Super Tough nylon carrier body. Supply with heavy-duty hook, swivel eye and 6" trim chain for attachment of curtain. Install rear fold guide and two round neoprene bumpers between each carrier on operating line to fold curtain at offstage edges and minimize noise.

Master carriers shall be 4-wheel urethane-tired sealed ball bearing assemblies with bodies formed from 11 gauge steel. Connect to operating line with two formed steel cord clamps attached to each body. Supply each master carrier with two heavy-duty hooks, swivel eyes and 6" trim chains for attachment of leading edge of curtain.

Single and double end pulleys shall clamp securely to the underside of the track channel and shall be equipped with 8" diameter Nylatron GS sheaves grooved for 1/2" operating line. Install two 5/8" sealed precision ball bearings in each sheave. Lock shaft to side plate on head end with 3/16" keeper pin to prevent rotation and install fine-threaded nylon insert lock nut.

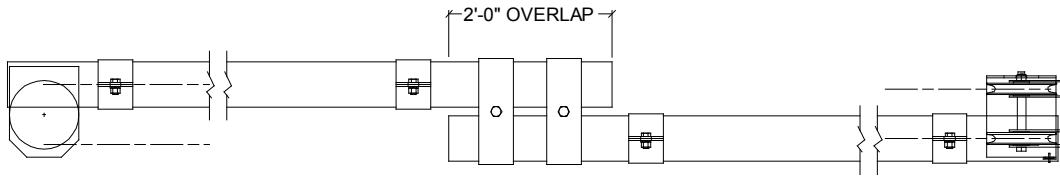
Provide floor block in 12 gauge steel housing containing 8" Nylatron sheave with two 3/8" sealed precision ball bearings. Sheave axle shall lock at any point within 9" vertical slots to allow tension adjustment of operating line.

Black operating line shall be 1/2" diameter, stretch-resistant rope with spun polyester outer jacket braided over polyester core.

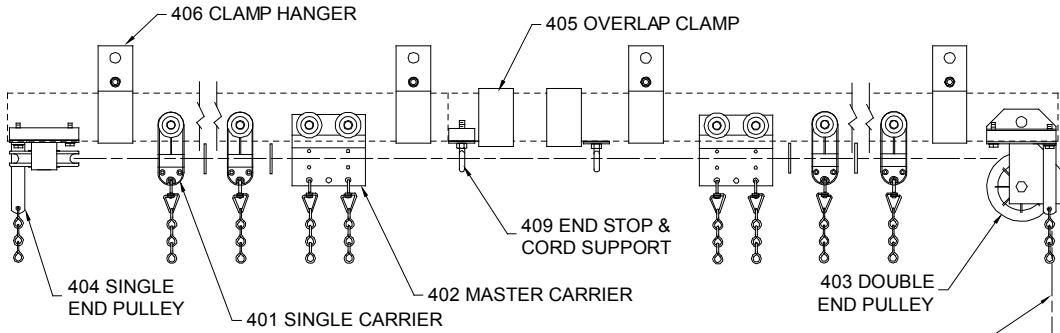
All steel components shall be zinc plated to resist corrosion.



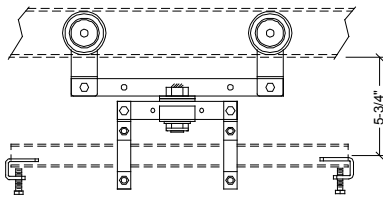
401S TRACK



PLAN - MODEL 401S COMPLETE TRACK



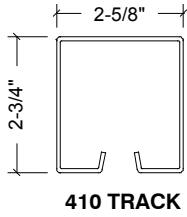
ELEVATION - MODEL 401S COMPLETE TRACK



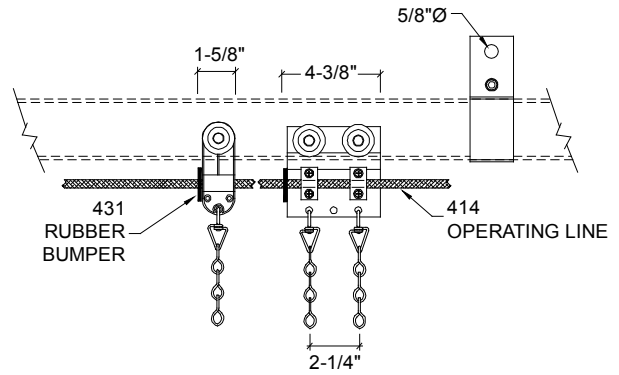
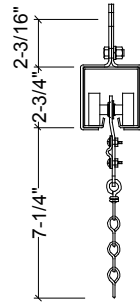
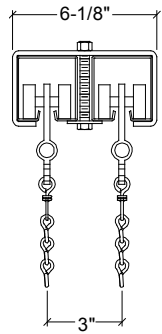
40 PIVOT DEVICE

414 OPERATING LINE

408 BLACK ADJUSTABLE FLOOR BLOCK

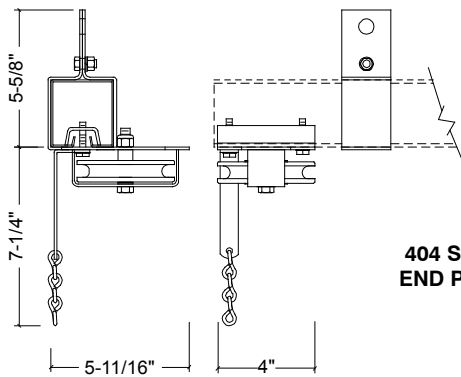


410 TRACK

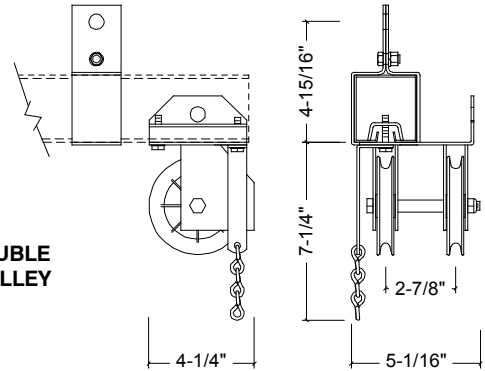


TRACKS AT CENTER OVERLAP

401 SINGLE CARRIER AND 402 MASTER CARRIER

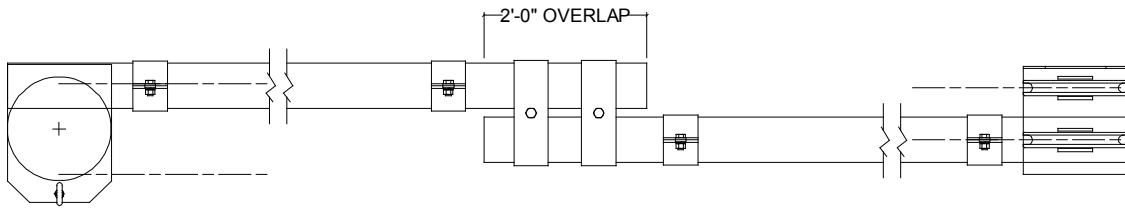


404 SINGLE END PULLEY

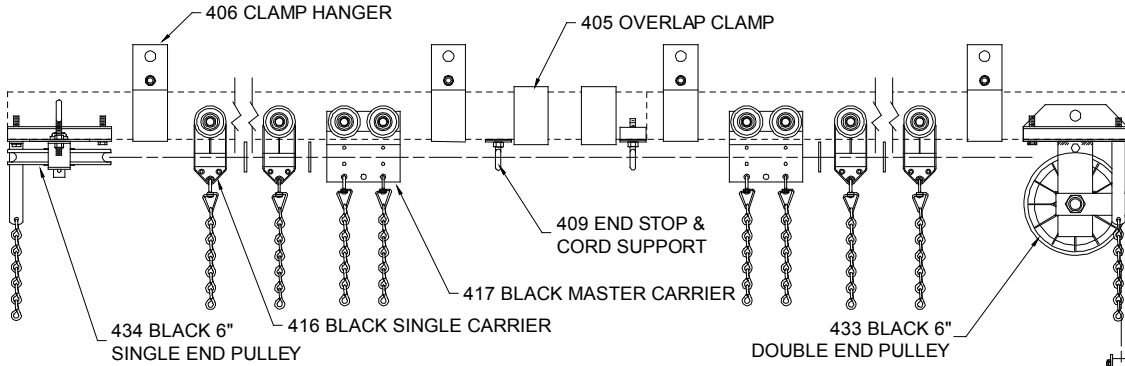


403 DOUBLE END PULLEY

416S TRACK

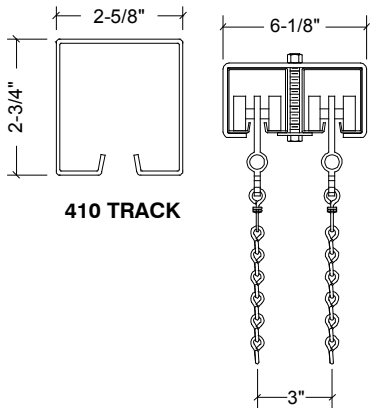
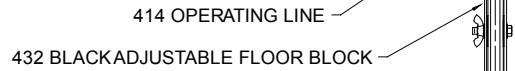


PLAN - MODEL 416S COMPLETE TRACK

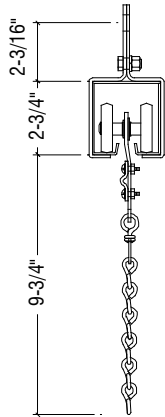


ELEVATION - MODEL 416S COMPLETE TRACK

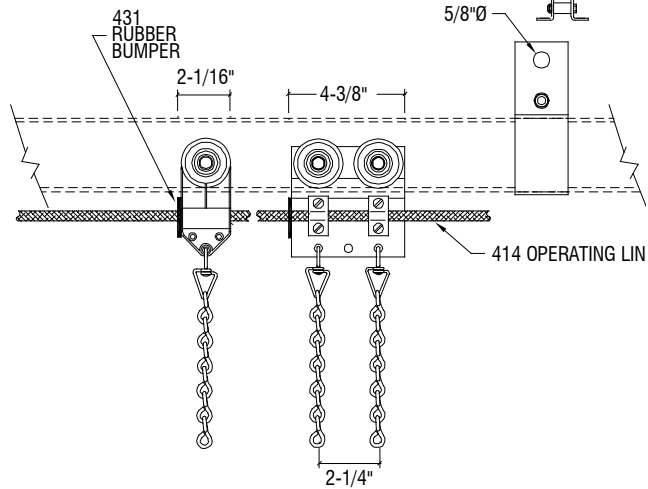
NOTE: 418S dimensions similar.



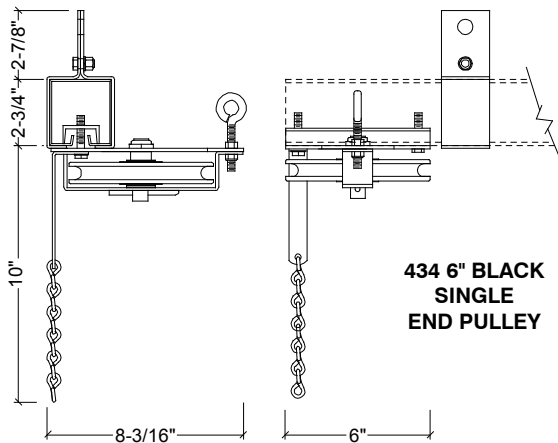
410 TRACK



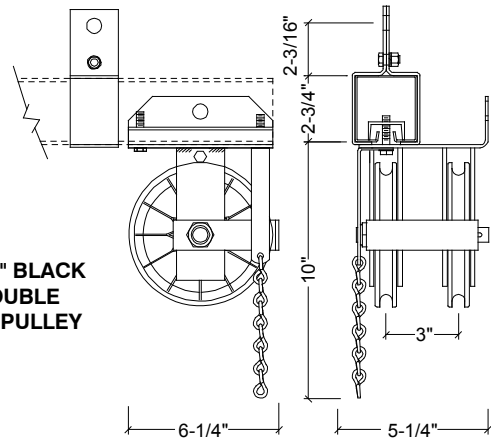
TRACKS AT CENTER OVERLAP



416 BLACK SINGLE CARRIER AND 417 BLACK MASTER CARRIER



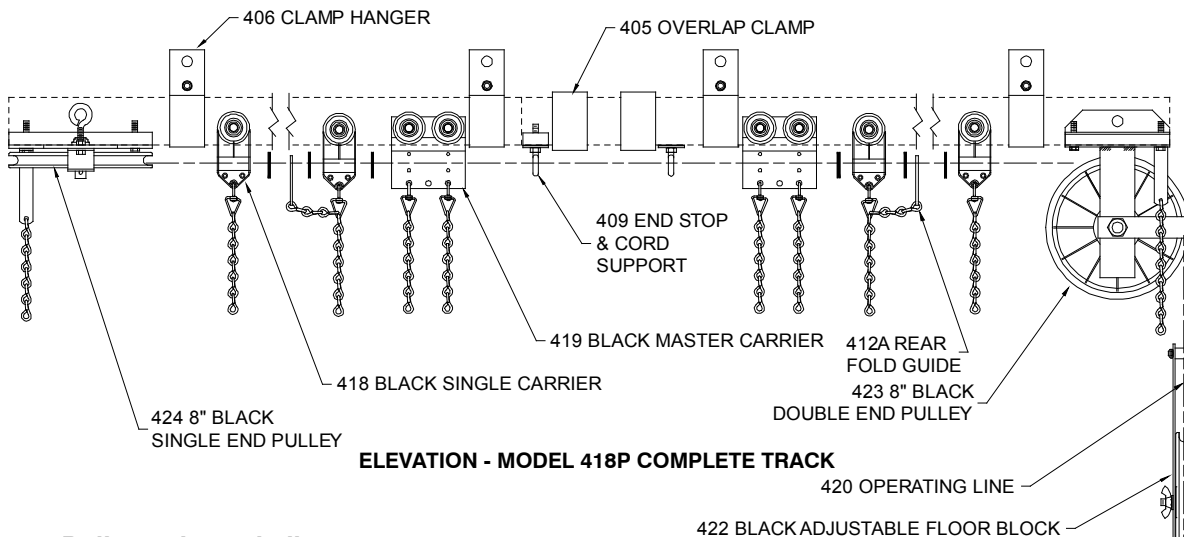
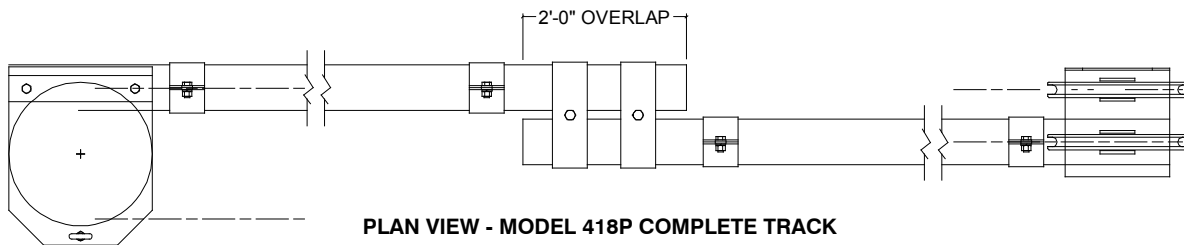
434 6" BLACK SINGLE END PULLEY



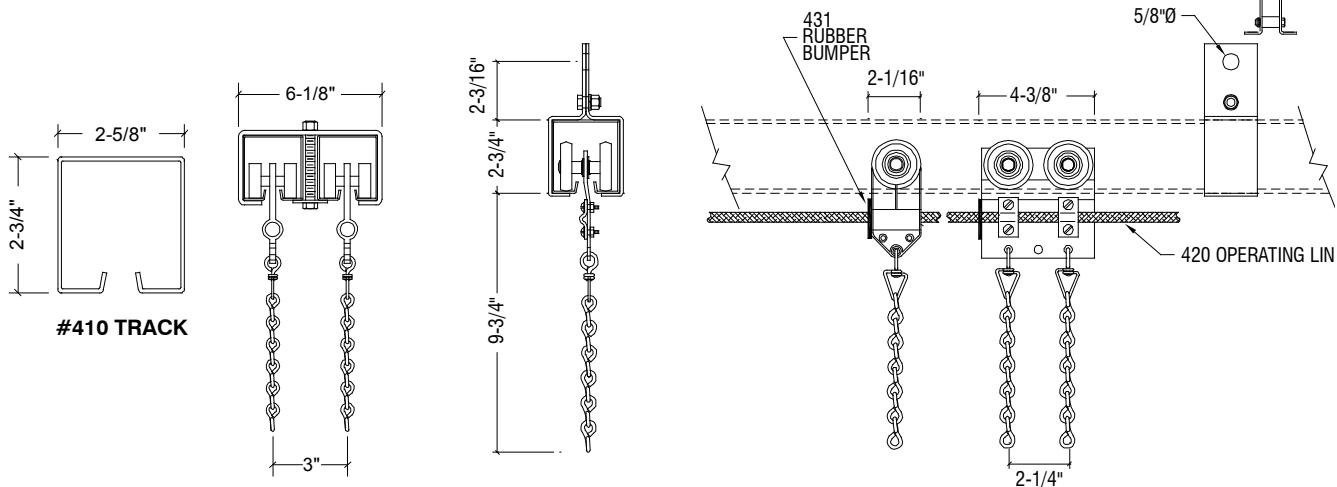
433 6" BLACK DOUBLE END PULLEY



418P TRACK

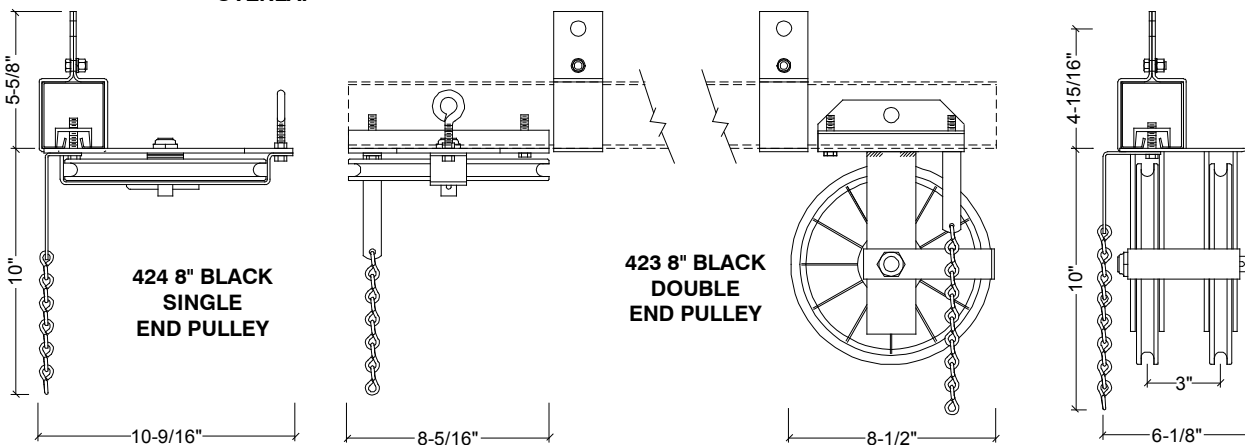


NOTE: 416P dimensions similar.

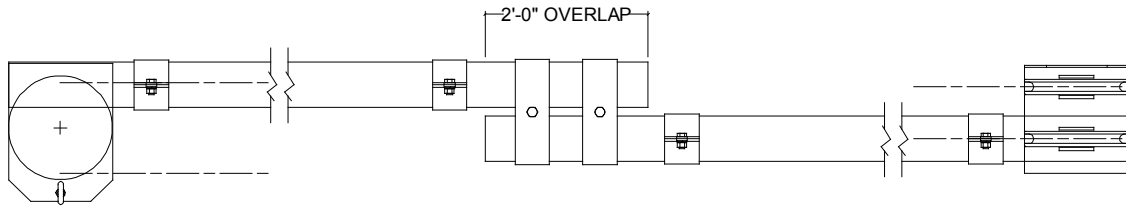


TRACKS AT CENTER OVERLAP

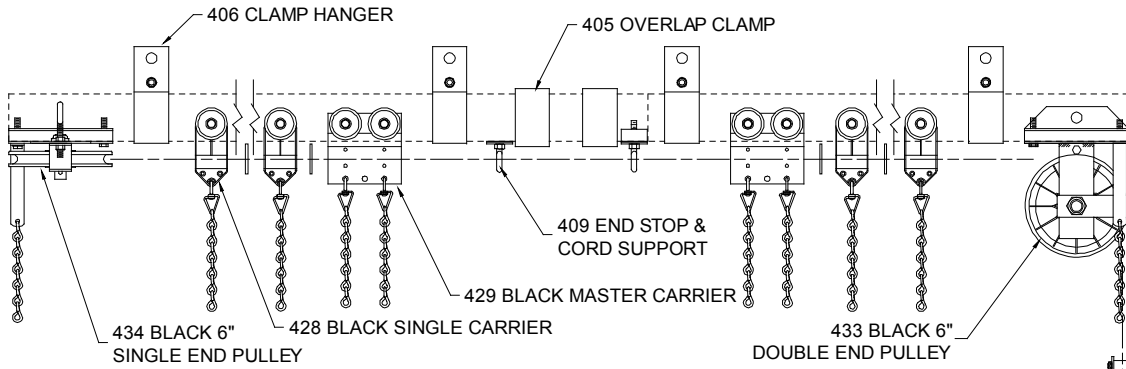
418 BLACK SINGLE CARRIER AND 419 BLACK MASTER CARRIER



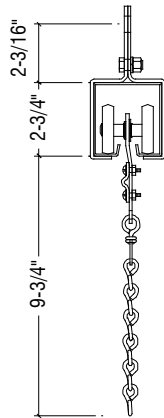
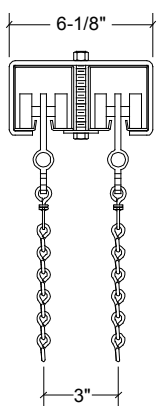
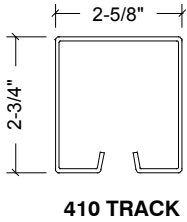
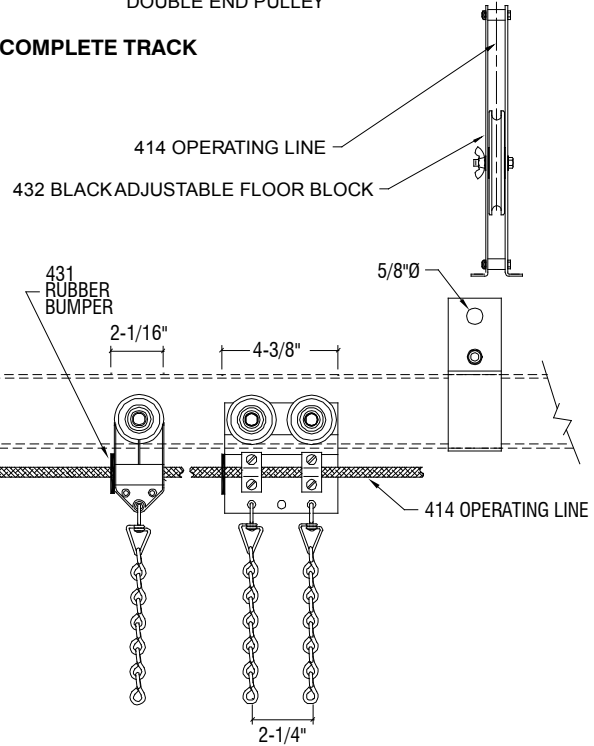
428S TRACK



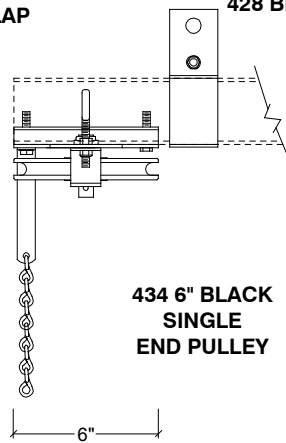
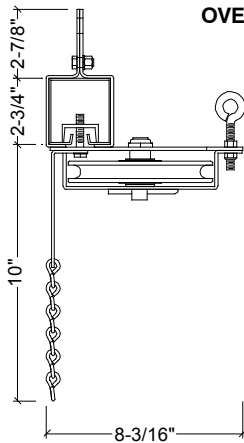
PLAN - MODEL 428S COMPLETE TRACK



ELEVATION - MODEL 428S COMPLETE TRACK

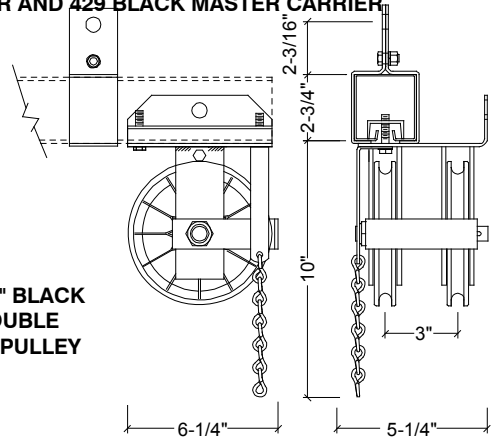


TRACKS AT CENTER OVERLAP



434 6" BLACK SINGLE END PULLEY

428 BLACK SINGLE CARRIER AND 429 BLACK MASTER CARRIER



433 6" BLACK DOUBLE END PULLEY