

# CATALOG

# TABLE OF CONTENTS

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Tru-Roll is a descendant of Grosh In the late 1940's, Tru-Roll was creatof Grosh to manufacture theatrical equipment in support of a growing entertainment industry in Southern

Scenic Studios. ed as a division

California. Within a few short years, Tru-Roll's success enabled it to expand into the fast growing theme park and Las Vegas entertainment industry, eventually becoming a major national manufacturer of stage equipment. In late 2009 Advanced Entertainment Technology was presented with the unique opportunity to purchase Tru-Roll. As a division of AET, Tru-Roll continues to provide it's signature drapery tracks and quality theatrical equipment worldwide.

For service and product inquiries contact us at:

Tru-Roll

**Theatrical Rigging & Hardware** A Division of Advanced Entertainment Technology 735 Los Angeles Avenue, Monrovia CA 91016 626.599.8337 Ext. 41 www.truroll.com

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# **Curtain Track Systems**

Tru-Roll manufactures curtain track systems to provide the following installation options:

- Straight, curved, or serpentine configurations.
- Bi-parting, lap, one-way draw or cascading functions. ٠
- Standard or rear-fold draw.
- Motorized, cord operated or walk-along operation.

The Curtain Track Selection Guide on the next page provides summary descriptions and criteria to aid in selection of a track system for an intended application. Additional detail of each track system is provided on the following pages.

The 1000 series Heavy Duty Straight Track is the most often specified Tru-Roll track for theatrical installations. The unique patented (U.S. Pat. No. 2753588) drop flange and carrier design provides self-aligning, non-fouling, quiet operation. Each carrier is fitted with a neoprene interlocking bumper which minimizes noise, maintains alignment and engages adjacent carriers during pack-up. Carrier tires of neoprene further contribute to smooth,

quiet operation.

### The 1200 series Medium Duty

Straight Track is a smaller and lighter aluminum version of the 1000 series track providing the same drop flange design for self aligning, quiet, non-fouling operation. The same carrier design is also employed. This track is used for lighter curtain loads and requires attachment to rigid support on shorter centers.





The 2000 Heavy Duty Truss Track and the smaller 2200 Medium Duty Truss Track may be configured in straight, curved, or serpentine shapes and may be motor or hand operated. The patented open frame design (U.S. Pat. No. 2753588) allows for easy carrier replacement and utilizes the same self-aligning and quiet carrier design as the 1000 series track. This track is frequently used for curtains fronting curved motion picture screens.

The 2300 and 2500 Cyclorama Tracks are designed for walk along operation. They can be supplied in straight, curved, or serpentine sections. No. 2500 is available in single, double and triple track construction, while the No. 2300 can be fabricated in single or double track configurations. A variety of track switching mechanisms are available to suit specific needs.

The 2900 Lift Curtain Rigging is designed for cascading Brail, Contour and Austrian puff curtains. The system incorporates independent lifting cables to uniformly raise or "sculpt" a drapery to a desired position. Support system may be rigged with a hand winch or fully-motorized operation.

### All Tracks

Operating pulleys for all rigged systems consist of moldformed Nylon 6/6 sheaves, integrally molded to a ball-bearing hub and mounted on a steel axle. Track carriers for heavy duty systems can be supplied with neoprene tired wheels (for loads up to 25 lbs./carrier) or with ball-bearing nylon-tired wheels (for loads up to 50 lbs./carrier). Both styles incorporate a fin-guided molded nylon body with a rubber bumper. Carriers for No. 1000 track may be standard or rear fold (back packing). Carriers for medium duty tracks are fabricated using nylon wheels and feature a one-piece nylon body with integral nylon bumper. Master carriers for all tracks are 4-wheel truck construction, joined by a metal body unit.



# **TRU-ROLL** CURTAIN TRACK SELECTION GUIDE

Series Number Profile Dimensions	Description & Application	recomr load per	mum mended r carrier <sup>1</sup> os.) Ball Bearing	Stacking require- ment per carrier <sup>2</sup> (Inches)	Hanger support spacing <sup>3</sup> (Feet)	Approxi- mate shipping weight per foot (Lbs)	Page No.
1000 2.25" W x 3.25" H	<b>Heavy Duty Straight Steel Track</b> - Straight tracks are available in motorized, cord operated, or walk-along for- mats. These tracks have an exclusive drop flange con- struction coupled with a fin guided carrier design to insure quiet, non-fouling and automatically aligning operation. Tracks may be rigged as bi-parting, lap, or one-way draw with standard or rear-fold carriers.	25	50	2-1/8 (Standard) 2 (Rear-Fold) + 8-1/4 (Leader)	6	2.7	1
1200 <b>J</b> 1.63" W x 2.25" H	<b>Medium Duty Straight Aluminum Track</b> - Straight tracks are available in motorized, cord operated, or walk-along formats. These tracks have an exclusive drop flange con- struction coupled with a fin guided carrier design to insure quiet, non-fouling and automatically aligning operation. Tracks may be rigged as bi-parting, lap, or one-way draw with standard carrier	25	NA	1-3/8 + 5-7/8 (Leader)	4	0.71	2
2000 9" W x 7.375" H	<b>Heavy Duty Truss Track</b> - Available in straight, curved, or serpentine sections. Track can be supplied for motorized operation. The parallel strong-back truss construction and aluminum intermediate supports result in an exceptionally strong and durable assembly. Radii on curved sections can be as small as 30" (762mm)	25	50	2-1/8 + 8-1/8 (Leader)	5	4.1	3
2200 5.125" W x 4.375" H	<b>Medium Duty Truss Track</b> - Available in straight, curved, or serpentine sections. Track can be supplied for motorized operation. The parallel strong-back truss construction and aluminum intermediate supports result in an exceptionally strong and durable assembly. Radii on curved sections can be as small as 18 " (508mm).	25	NA	1-3/8 + 3-1/2 (Leader)	4	1.28	4
2300 <b>2</b> .375" W x 5.125" H	Medium Duty Cyclorama Track - Designed for walk along operation, track can be supplied in straight, curved, or ser- pentine sections. Can be fabricated in single or double track configurations. A variety of track switching mecha- nisms are available to suit specific needs. May be rolled to radii as small as 18" (305mm). The open rail construction makes for simple maintenance and easy carrier replace- ment	25	NA	1-3/8 + 3-7/8" (Leader)	4	1.19	5
2500 3.25" W x 8.5" H	Heavy Duty Cyclorama Track - Designed for walk along operation, track can be supplied in straight, curved, or serpentine sections. Available in single, double and tri- ple-track construction. A variety of track switching mech- anisms are available to suit specific needs. May be rolled to radii as small as 24" (610mm). Heavy wall tubing can be substituted for applications requiring extra wide supports or heavy loads	25	50	2-1/8" ea. (+ 6-1/8" Leader)	5	1.8	6
2900 	<b>Lift Curtain Rigging</b> - Designed for Brail, Contour and Austrian puff curtains. The system incorporates indepen- dent lifting cables to uniformly raise or "sculpt" a drapery to a desired position. Support system may be rigged with a hand winch, locking gear box with removable drill motor, or fully-motorized operation	NA	NA	NA	4-5 (Tube) 5-7 (Pipe)	Weight sub- ject to System Design	7

1. Working load (drapery weight) per carrier based on 12" standard spacing of carriers for cord operated track.

2. Multiply the carrier stacking length by the number of carriers and add the sum to the Standard Leader length to obtain the total stacked length.

3. Recommended distance between track hangers and connection to a rigid support.

# THEATRICAL CURTAIN TRACK ORDERING GUIDE

This curtain track ordering guide is provided to aid in the understanding, selection and specification of an appropriate Tru-Roll track system for a given application. It should also provide insight into the conventions of curtain track design.

In order to make a track selection the following must be determined:

- 1. Size and weight of the curtain load.
- 2. Curtain operation parameters.
- 3. Track suspension method.
- 4. Overall track length requirement.

## **1. ESTIMATING CURTAIN SIZE AND WEIGHT**

Determine the height and width of the finished curtain in feet. Also determine if the curtain will be fabricated for one-way operation, or divided into two panels for lap or bi-parting operation.

As an example, we will calculate for a bi-parting curtain to fill a space 20 feet high by 30 feet wide made of 25 oz/yd<sup>2</sup> velour fabric with an 8 oz/yd<sup>2</sup> fabric liner.\* The bi-parting curtain will have a 2 foot overlap in the center and 100% fullness.\*\*

To compute the curtain weight, add the Velour fabric weight to the liner weight to get a sum of 33 ounces per square yard. Divide by 9 to get 3.67 ounces per square foot.

The height of the curtain is 20 feet, add 1 foot for top hem and bottom chain pocket and then multiply 21 x 3.67 = 77.07 ounces. Doubling this for the 100% fullness equals 154.14 ounces. Divide by 16 and get 9.63 pounds. Finally, add 0.25 pounds for webbing and pocket chain. This results in 9.88 pounds per running foot. The total curtain width plus a 2 foot overlap is 32 feet x 9.88 = 316.16 Lbs. total weight. (Note that each curtain panel includes half of the 2 foot overlap.)

Here is the consolidated calculation:

- 25 oz/yd<sup>2</sup> velour fabric weight
- <u>+ 8</u> oz/yd<sup>2</sup> liner weight
- 33 ounces per square yard, all fabric
- ÷ 9 convert to square feet
- 3.65 ounces per square foot
- × 21 curtain height in feet + 1 foot for pocket & hem
- 77.07 ounces per running foot of fabric
- × 2 100% fullness multiplier
- 154.14 ounces per running foot of pleated fabric
- ÷ 16 convert to pounds
  - 9.63 pounds per running foot of pleated fabric
  - +.25 weight of webbing and pocket chain per foot
  - 9.88 pounds per running foot of finished curtain

The finished curtain dimension: Two 20 foot high by 16 foot wide panels. (Note: Other issues such as side masking and sightlines may affect actual curtain size requirements.)

As a general rule, Tru-Roll recommends that its medium weight tracks be limited to use for curtains up to 15 feet high and its heavy weight tracks be limited to use for curtains up to 30 feet high.

\* Note that in the United States, theatrical fabric weights are still generally specified in ounces per square yard while the rest of the world uses grams per square meter (GSM or g/m<sup>2</sup>). To convert, divide GSM by 33.906 to get oz/yd<sup>2</sup>. Beware that some fabric vendors will specify fabric weight by linier yard, which must be corrected for this calculation.

\*\* Fullness describes the amount of pleating at the top of the curtain to improve appearance over that of a flat panel. 100% fullness indicates that every foot of curtain width uses a two foot width of fabric. Typical fullness specifications include  $50\% = 1 \frac{1}{2}x$ , 100% = 2x, and 200% = 3x.

## 2. CURTAIN OPERATION PARAMETERS

These are design options determined by operational and aesthetic requirements. Select the option from each category that best meets functional requirements for narrowing track selection.

- A. Curtain draw options include: one way travel of a single drapery panel, lap or bi-parting operation of two opposing panels, and cascade (vertical travel) of one or multiple panels. (Note: Lap utilizes a single continuous track with Lap Leaders providing a 6-inch center overlap of drapery. A Bi-parting configuration uses overlapping tracks to provide a center overlap of any length, typically 18 to 36 inches.)
- B. Curtains may be operated by motorized automation, cord operated by hand, or moved with a walk along dragline.
- C. Tracks are available for straight, curved, or serpentine configurations.
- D. 1000 series track can be supplied with standard or rear-fold carriers. See diagram below for a pictorial description.



Using curtain size, weight, and the chosen operation parameters, an appropriate track series number may be selected from the Tru-Roll Curtain Track Selection Guide on the previous page.

### 3. TRACK SUSPENSION METHOD

The installation location will dictate the track suspension method. Track must be supported from a rigid structure, using hanger spacing that does not exceed the minimum spacing requirement shown in the Curtain Track Selection Guide. For theatre stages with overhead rigging, Tru-Roll hangers for attachment to pipe truss or battens should be used.

Attachment to other overhead beams or structure should be engineered to meet the governing overhead rigging & lifting standards and is the responsibility of the owner. Custom hardware is available for attachment to I-beam and strut channel installations.

Additional consideration must be given to the support of the outside ends of the track. Realize that when the curtain is fully open, all the weight is transferred to the end of the track. This can be a substantial load with heavy theatrical drapes.

### 4. CALCULATE OVERALL TRACK LENGTH REQUIREMENT

Track length is determined by adding the curtains stacking dimension and track end hardware to the desired finished opening dimension, plus overlap.

Continuing with the example used above for a 20-foot high by 30-foot wide bi-parting curtain, we concluded with two curtain panels 20 foot high and 16 foot wide to allow for a 2-foot overlap.

Using the criteria from 1 & 2 above, Tru-Roll 1000 series straight track is chosen for this example.

The nominal opening of the curtain is 20 by 30 feet. For this example, we will factor in a sight-line consideration, which requires the leading edge of the curtain to open a foot past the nominal opening. The finished opening width will therefore be 32 feet.

The curtain-stacking dimension, when fully open, is equal to the sum of the leader length plus the number of carriers times the carrier length. In our example, each 16-foot curtain panel will have 17 snap connectors on one-foot centers. The leader connects to the first two snaps, requiring 15 carriers for the remaining snaps. Referring to the Stacking Requirement column in the Curtain Track Selection Guide, the leader length for the 1000 Series track is 8-1/4 inches and the standard carrier stacking length is 2-1/8 inches. 2-1/8 × 15 = 31-7/8. Add 8-1/4 inches leader length for a total stacking length of 40-1/8 inches for each panel.

Each cord operated track is equipped with one head block and one tail block assembly which require track space on the outside ends of the track.\* Refer to the table below for dimensional requirements. The standard 5-1/2" Dia. Head and Tail blocks for the 1000 Series track require 9 inches each for mounting.

To finalize the track length for each overlapping track segment, add one half of the desired finished opening to one half of the overlap, plus the stacking length for one panel, plus 9 inches for mounting the pulley assembly.

One half of 32 feet = 16'
One half of 2 feet $= 1'$
40-1/8" + 9" = 49-1/8" = 4'-1-1/8"
Total length per segment: 21'- 1-1/8"

Two segments equal 42 feet 2-1/4". Since the track is sold in one-foot increments, the total track required is 43 feet configured in two equal sections with the specified overlap.

\* Please note that the use of standard head & tail blocks applies to cord operated track, and are not required for walk-along operation. For motorized operation, consult with the factory.

### **USING CWANA**

CWANA is an industry acronym for "Complete With All Necessary Accessories." Tru-Roll offers CWANA packages for standard configurations of all track systems to simplify the specification and ordering process.

The track systems data pages that follow provide CWANA package information and part numbers for all hardware and accessories associated with each track series. Consult the factory for custom track configuration and automated curtain operation.

HEAD & TAIL BLOCK TRACK SPACE REQUIREMENTS Add head and tail block space dimension allowance to track length for cord operated curtains.										
	1000 series SKU No.	Track Space (inches)	1000 series Rear-Fold SKU No.	Track Space (inches)	1200 series SKU No.	Track Space (inches)	2000 series SKU No.	Track Space (inches)	2200 series SKU No.	Track Space (inches)
Std. Head Block	1002	8	1002RF	9	1202	3	2003	10	2203	5
Std. Tail Block	1003	8	1003RF	9	1203	3	2006	8	2206	4
8" Head Block	1002A	9	1002RFA	9						
8" Tail Block	1003A	11	1003RFA	11						

# TRU-ROLL CURTAIN TRACK SERIES OPTIONS



**Straight Track** - Available in motorized, cord operated, or walk-along formats. These tracks have an exclusive drop flange construction coupled with a fin guided carrier design to insure quiet, non-fouling and automatically aligning operation.

1000 HEAVY DUTY STRAIGHT STEEL TRACK



2000 HEAVY DUTY TRUSS TRACK

**Truss Track** - Available in straight, curved, or serpentine sections with standard carriers. Track can be supplied for motorized operation. The parallel strong-back truss construction and aluminum intermediate supports result in an exceptionally strong and durable assembly.



2300 MEDIUM DUTY CYCLORAMA TRACK

**Cyclorama Track** - Designed for walk along operation, track can be supplied in straight, curved, or serpentine sections. A variety of track switching mechanisms are available to suit specific needs.



2900 LIFT CURTAIN RIGGING

### DISCLAIMER

The Tru-Roll track products in this catalog are designed for theatrical curtains and moving panels. Tru-Roll will not warrant or make any representation as to the suitability of any product for any application not specifically designed and engineered by the factory, and the product is installed precisely as required by Tru-Roll. NONE OF THE PROD-UCTS LISTED IN THIS CATALOG ARE INTENDED FOR USE IN LIFTING OR MOVING PEOPLE OR OTHER LIVING LOADS!



**1000 Heavy Duty Straight Track** is 14-gauge roll-formed galvanized steel with drop flange construction. CWANA\* prices are based on purchase of 20 ft., 24 ft. or 30 ft. track lengths. Shorter lengths to be priced using individual parts and minimum track lengths of 20 ft. Track lengths over 30 ft. use CWANA price for first 30 ft. then individual pricing for additional components. Track may be equipped with standard or rear-fold drapery carriers, scenery leaders (master carriers), mask-ing leaders or pivot leaders.

### \*CWANA = <u>C</u>omplete <u>With All N</u>ecessary <u>A</u>ccessories

**1000 Series** straight tracks are available in motorized, cord operated, or walk-along formats. These tracks have an exclusive drop flange construction coupled with a fin guided carrier design to insure quiet, non-fouling and automatically aligning operation. Track may be rigged as bi-parting, lap, or one-way draw.

- 1 ea. 1001 Track (20 ft. length minimum)
- 1 ea. 1002 Head Block
- 1 ea. 1003 Tail Block
- 1 ea. 1010 Adjustable floor mount Tension Block
- 2 ea. 1004 Leaders (Master Carriers)
- 1 lot 8010 Carriers (one per foot of track)
- 1 lot 1013 Intermediate Track Hangers (provided on 6 ft. centers)
- 1 pr. 1011 Center Hanger for bi-parting track

CWANA 100	0 Drapery Track assemblies (specify length):					
1000	Standard CWANA					
1000RF	Rear-Fold CWANA					
1000BB	Standard Ball Bearing CWANA					
1000RFBB	Rear-Fold Ball Bearing CWANA					
Additional C	components (extra charge):					
1913S	Splice Hanger					
1050	Lug Splice					
1009	Floating Tension Block					
Operating L	Operating Line:					
BC12	3/8" diameter bell cord					
SC12	3/8" diameter sash cord					
WRL14	3/16 x 1/4" Nylon coated steel cable					



**1200 Medium Duty Straight Track** is a .075" powder coated aluminum extrusion with drop flange construction. CWANA\* prices are based on purchase of 20 ft., 24 ft. or 30 ft. track lengths. Shorter lengths to be priced using individual parts and minimum track lengths of 24 ft. Track lengths over 30 ft. use CWANA price for first 30 ft. then individual pricing for additional components. Track may be equipped with standard leaders (master carriers), drag line leaders, masking leaders or pivot leaders.

### \*CWANA = Complete With All Necessary Accessories

**1200 straight tracks** are available in motorized, cord operated, or walk-along formats. These tracks have an exclusive drop flange construction coupled with a fin guided carrier design to insure quiet, non-fouling and automatically aligning operation. Tracks may be rigged as bi-parting, lap, or one-way draw.

- 1 ea. 1201 Track (20 ft. length minimum)
- 1 ea. 1202 Head Block
- 1 ea. 1203 Tail Block
- 1 ea. 1211 Spring Loaded Tension Block
- 2 ea. 1204 Leaders (Master Carriers)
- 1 pr. 1207 Center end stop with idler
- 1 lot 1208 Intermediate track hangers (provided on 4 ft. centers)
- 1 pr. 1209 Center hanger (if bi-parting)
- 1 lot 1210 Carriers (one per foot of track)

CWANA 12	200 Drapery Track assemblies (specify length):	
1200	Standard CWANA	

# TRU-ROLL 2000 SERIES TRUSS TRACK

**2000 Heavy Duty Truss Track** is formed using parallel 1-1/4 inch steel tubes and parallel 14 gauge "C" channel carrier rails, supported with precision aluminum castings on 30 inch centers. CWANA\* prices for straight and curved track sections are based on purchase of 20 ft. track lengths. Minimum curve radius is 30 inches. Shorter lengths are priced on request

### \*CWANA = Complete With All Necessary Accessories

**2000 Truss Track** is available in straight, curved, or serpentine sections. Tracks can be supplied for manual, or preferably, motorized operation. Originally developed to meet the requirements of "Cinerama" in the 1950's, these tracks are renowned for providing years of trouble free operation. The parallel strong-back truss construction and aluminum intermediate supports result in an exceptionally strong and durable assembly. Radii can be as small as 30 inches on the curved sections of this track.

- 1 sect. 2000 Track Assembly
- 1 ea. 2003 Head Block
- 1 ea. 2006 Tail Block
- 1 ea. 2007 Leader (master carrier)
- 2 ea. 2008 End Stops
- 1 lot. 2014 Hangers (provided on 5 foot centers)
- 1 ea. 1010 Adjustable floor mounted tension block
- 1 lot. 8010 Standard Carriers (12" on center)

CWANA 2000 Drapery Track assemblies (specify length):					
2000	Heavy Duty Truss Track - 20' Straight Section				
2000C	Heavy Duty Truss Track - 20' Curved Section				



**2200 Medium Duty Truss Track** is formed using parallel 5/8 inch steel tubes and parallel 14 gauge "C" channel carrier rails, supported with precision aluminum castings on 24 inch centers. CWANA\* prices for straight and curved track sections are based on purchase of 20 ft. track lengths. Minimum curve radius is 18 inches. Shorter lengths are priced on request.

### \*CWANA = Complete With All Necessary Accessories

**2200 Truss Track** is available in straight, curved, or serpentine sections. Tracks can be supplied for manual, or preferably, motorized operation. Originally developed to meet the requirements of "Cinerama" in the 1950's, these tracks are renowned for providing years of trouble free operation. The parallel strong-back truss construction and aluminum intermediate supports result in an exceptionally strong and durable assembly. Radii can be as small as18 inches on the curved sections of this track.

- 1 sect. 2200 Track Assembly
- 1 ea. 2203 Head Block
- 1 ea. 2206 Tail Block
- 1 ea. 2207 Leader (master carrier)
- 2 ea. 1207 End Stops
- 1 lot. 2214 Hangers (provided on 5 foot centers)
- 1 ea. 1211 Spring loaded floor mounted tension block
- 1 lot. 1208 Standard Carriers (12" on center)

	CWANA 2200 Drapery Track assemblies (specify length):					
	2200	Heavy Duty Truss Track - 20' Straight Section				
2200C Heavy Duty Truss Track - 20' Curved Section						



**2300 Medium Duty Cyclorama Track** is constructed using a 1-1/4" O.D. x .049" steel tube strong-back from which 14 gauge "C" channel carrier rails are supported. Track assemblies are supplied in straight or curved sections. Carrier rails are concentrically roll formed to match strong-back. Heavy wall tube may be substituted on strong-back for applications requiring extra wide supports or heavy loads. Master carriers are supplied with a nylon coated wire rope pull line for walk-along operation. CWANA\* prices for straight and curved track sections are based on purchase of 20 ft. track lengths. Minimum curve radius is 18 inches. Shorter lengths are priced on request

\*CWANA = Complete With All Necessary Accessories

**2300 Cyclorama Tracks** are designed for walk along operation and are supplied in straight, curved, and serpentine sections. **2300** can be fabricated in single or double-track assemblies. A variety of track switching mechanisms (examples below) are available for the track system. Open rail construction makes for simple maintenance and carrier replacement.

CWANA Drapery track assemblies include the following components:

1 sect. 2300 Track Assembly

- 1 lot 1015D Track Tube Clamps (4 foot on center)
- 1 ea. 1206 Leader (master carrier) with drag line cable & pull ring per track
- 1 pr. 1207 Track End Stops per track
- 1 lot 1210 Intermediate Carriers (12" on center)

CWANA 230	CWANA 2300 Drapery Track assemblies (specify length):						
2300	Single Cyclorama Track - Straight CWANA						
2300C	Single Cyclorama Track - One Curve CWANA						
2300-2	Double Cyclorama Track - Straight CWANA						
2300-2C	Double Cyclorama Track - One Curve CWANA						



SAMPLE CYCLORAMA TRACK SWITCHING PLANS Call factory for pricing.

# TRU-ROLL 2500 SERIES CYCLORAMA TRACK

**2500 Heavy Duty Cyclorama Track** is constructed using a 2" O.D. x .049" steel tube strong-back from which 14 gauge "C" channel carrier rails are supported. Track assemblies are supplied in straight or curved sections. Carrier rails are concentrically roll formed to match strong-back. Heavy wall tube may be substituted on strong-back for applications requiring extra wide supports or heavy loads. Master carriers are supplied with a nylon coated wire rope pull line for walk-along operation. CWANA\* prices for straight and curved track sections are based on purchase of 20 ft. track lengths. Minimum curve radius is 24 inches. Shorter lengths are priced on request. Standard center spacing for double or triple track is 8 inches.

\*CWANA = Complete With All Necessary Accessories

**2500 Cyclorama Tracks** are designed for walk along operation and are supplied in straight, curved, and serpentine sections. **2500** can be fabricated in single, double or triple track assemblies. A variety of track switching mechanisms (see examples on page 10) are available for the track system. Open rail construction makes for simple maintenance and carrier replacement.

CWANA Drapery track assemblies include the following components:

1 sect. 2500 Track Assembly

- 1 lot 1015C Track Tube Clamps (5 foot on center)
- 1 ea. 1006 Leader (master carrier) with drag line cable & pull ring per track
- 1 pr. 2008 Track End Stops per track
- 1 lot 8010 Intermediate Carriers (12" on center)

CWANA 250	CWANA 2500 Drapery Track assemblies (specify length):				
2500	Single Cyclorama Track - Straight CWANA				
2500C	Single Cyclorama Track - One Curve CWANA				
2500-2	Double Cyclorama Track - Straight CWANA				
2500-2C	Double Cyclorama Track - One Curve CWANA				
2500-3	Triple Cyclorama Track - Straight CWANA				
2500-3C	Triple Cyclorama Track - One Curve CWANA				

# **TRU-ROLL** 2900 LIFT CURTAIN RIGGING

**2900 Lift Curtain Rigging** is designed for Brail, Contour and Austrian puff curtains. The system incorporates independent lifting cables to uniformly raise or "sculpt" a drapery to a desired position. Support system may be rigged with a hand winch or fully-motorized operation. The modular system employs a universal aluminum casting supporting a variety of load pulley and idler combinations. These modular castings may be mounted on 2" O.D. steel tube or 1-1/2" I.D. pipe. A set screw is provided to prevent rotation. Lift cables feeding from these pulleys are typically routed to mule blocks where the load is transfered by clew to a single operating line.



**2900 Lift Curtain Hardware** include the No. 29 series Lift Curtain Pulley & Idler Assemblies, sash weights, wire guide clews and custom mule block and lifting mechanics. Horizontal sliding arbors may be substituted for wire guide clews. Pulleys are 2-1/2" diameter, available with 1/4" or 3/32" cable groove.

Stock Parts List:

PART NO.	DESCRIPTION			
2S29	Lift curtain pulley			
29-1	Lift curtain pulley + 1 idler	(g=		()
29-2	Lift curtain pulley + 2 idlers	(P)		1300
29-3	Lift curtain pulley + 3 idlers			
29-4	Lift curtain pulley + 4 idlers			
29-5	Lift curtain pulley + 5 idlers		3	
29-6	Lift curtain pulley + 6 idlers			
29-8	Lift curtain pulley + 8 idlers			
29-10	Lift curtain pulley + 10 idlers	2900 S	AMPLE BATTEN ASS	SEMBLY
29-12	Lift curtain pulley + 12 idlers			
29S	Swivel type single line pulley			
WS10	Wood spacer 4"			
WS1	Wood spacer 6"			
79-6	6:1 Line wire guide clew			····· //
79-8	8:1 Line wire guide clew			0.//
79-12	12:1 Line wire guide clew			
5010-1	5010-1 1 Pound sash weight			
5010-2	5010-2 2 Pound sash weight	Wood Spacer	5010-1	79-6
WRL12	3/32" wire rope with 1/8" Nylon jacket	Wood Spacer.	Sash Weight.	6:1 Wire Guide Clew.
WRL14	3/16" wire rope with 1/4" Nylon jacket			

Mule Blocks and rigging for Lift Curtains are customized for each installation and curtain design. Pricing is available on request.

# TRU-ROLL TRACK CARRIERS



Part No. **8010** Standard Neoprene Carrier.





Part No. **8010BB** Standard Ball Bearing Carrier.



Part No. **8010RF** Rear-Fold Neoprene Carrier.



Part No. **8010RFBB** Rear-Fold Ball Bearing Carrier.



Part No. **8011** Rear-Fold Washers for 3/8" Diameter Cord.



Part No. **1210** Intermediate Neoprene Carrier.

### TRACK CARRIER COMPATIBILITY GUIDE

TRACK SERIES	8010	8010BB	8010RF	8010RFBB	1210
1000 STANDARD STRAIGHT TRACK	1	1			
1000 REAR-FOLD STRAIGHT TRACK			1	✓	
1200 STRAIGHT TRACK					✓
2000 TRUSS TRACK	✓	1			
2200 TRUSS TRACK					1
2300 CYCLORAMA TRACK					1
2500 CYCLORAMA TRACK	✓	1			

# TRU-ROLL 1000 SERIES TRACK LEADERS



STANDARD LEADERS 1004 Leader (pictured above.) 1004BB Leader, Ball Bearing. RETURN TO NAVIGATION PAGE FOR TRACK SERIES:



LAP LEADERS

**1005** Lap Leader. **1005BB** Ball Bearing Lap Leader (Pictured) Lap Leaders provide a 1 foot (approx.) curtain overlap on a single continuous track.



# **DRAG LINE LEADERS\***

**1006** Drag Line Leader (pictured above.) **1006BB** Ball Bearing Drag Liine Leader.



**REAR-FOLD LEADERS** 

**1004RF** Rear-Fold Leader (pictured above) **1004RFBB** Ball Bearing Rear Fold Leader.



**1004RFS** Rear Fold Leader with Striker Arm. **1005RFSBB** Ball Bearing Version (Pictured.)



# MASKING LEADERS 1006M Masking Leader.

**1006MBB** Ball Bearing Masking Leader.



Provided with 2" diameter x 5 ft. long round steel tube.

**1006PPCL** Ceiling Mount Pivot Leader (Pictured Right.)



\* Nylon coated 1/8" Cable drag line (up to 25') with 3" dia. steel ring included. (not shown) See the 1206 Leader on the next page as an example. This leader also used for the 2500 Series Heavy Duty Cyclorama Track.



# SCENERY LEADERS

**1006SCBB** Plate with 1/2" hole. **1006SCBB1/2** Plate w 1/2"x5" all-thread. **1006SCBB3/8** (Pictured) w 3/8"x5" all-thread.

# TRU-ROLL 1200 SERIES TRACK LEADERS



### STANDARD LEADER

**1204** Standard Intermediate Leader (Master Carrier.)

RETURN TO NAVIGATION PAGE FOR TRACK SERIES:



LAP LEADER

**1205** Lap Leader (A pair of Lap Leaders provide a 1 foot (approx.) curtain overlap on a single continuous track.)



# **MASKING LEADERS**

**1206M6** Masking Leader 6" chain spacing. **1206M9** Masking Leader 9" chain spacing.





# **1206** Drag Line Leader with 3" steel ring and up to 20 ft. 1/8" Nylon Coated Cable. This leader also used for 2300 Series Cyclorama Track.

# TRU-ROLL 2000 & 2200 SERIES TRACK LEADERS

RETURN TO NAVIGATION PAGE FOR TRACK SERIES:

2000 SERIES TRACK



STANDARD LEADER 2007 Standard Leader (Pictured.) 2007BB Leader with Ball Bearings



LEADERS WITH STRIKER ARM

**2007S** Leader with Striker Arm (Pictured.) **2007SBB** Same with Ball Bearings



SCENERY LEADERS 2007SCBB1/2 Scenery Leader with 1/2" x 5" threaded rod.



### LEADER ADAPTER

# 2200 SERIES TRACK



STANDARD LEADER 2207 Standard Leader (Master Carrier)

**8421** Leader Adapter for 2007 Series Leaders for 3/8" dia. Bell cord. Two required for each Leader.



LEADER ADAPTER

**8422** Leader Adapter for 2207 Series Leaders for 1/4" dia. Bell cord. Two required for each Leader.



**LEADER WITH STRIKER ARM** 2207S Leader with Striker Arm.

# TRU-ROLL 1000 & 1200 SERIES HEAD BLOCKS



5-1/2 INCH HEAD BLOCK 1002 Head Block, 5-1/2" diameter Nylon sheave.

RETURN TO NAVIGATION PAGE FOR TRACK SERIES:



8 INCH HEAD BLOCK 1002A Head Block, 8" diameter Nylatron sheave.



HORIZONTAL TAKE-OFF HEAD BLOCK

1002H Head Block, horizontal take-off.



REAR-FOLD HEAD BLOCK 5.5" 1002RF Rear-Fold Head Block, 5-1/2" diameter Nylon sheave.



**REAR-FOLD HEAD BLOCK 8" 1002RFA** Rear-Fold Head Block, 8" diameter Nylatron sheave.



VERTICAL TAKE-OFF HEAD BLOCK

1002V Head Block, vertical take-off.



VERTICAL TAKE-OFF REAR-FOLD HEAD BLOCK

**1002RFV** Rear-Fold Head Block, vertical take-off.



HEAD BLOCK 1202 Head Block for 1200 Series Track.



HORIZONTAL TAKE-OFF HEAD BLOCK

1202H Head Block, horizontal take-off.

# TRU-ROLL 2000 & 2200 SERIES HEAD BLOCKS

RETURN TO NAVIGATION PAGE FOR TRACK SERIES:



HEAD BLOCK & CASTING 2003 Standard Head Block with casting for 2000 Series Track.



VERTICAL TAKE-OFF HEAD BLOCK & CASTING

**2004C** Head Block, vertical take-off for 2000 Series Track.



HORIZONTAL TAKE-OFF HEAD BLOCK & CASTING

**2005** Head Block, horizontal take-off for 2000 Series Track.



HEAD BLOCK 2003A Head Block without casting for 2000 Series Track.



VERTICAL TAKE-OFF HEAD BLOCK

**2004** Head Block without casting for 2000 Series Track..



HEAD BLOCK 2203A Head Block without casting for 2200 Series Track.



HORIZONTAL TAKE-OFF HEAD BLOCK

**2205** Head Block without casting for 2200 Series Track...



HEAD BLOCK & CASTING 2203 Standard Head Block with casting for 2200 Series Track.



VERTICAL TAKE-OFF HEAD BLOCK

**2204** Vertical take-off Head Block for 2200 Series Track.



HORIZONTAL TAKE-OFF HEAD BLOCK & CASTING

**2205C** Head Block, horizontal take-off with casting for 2200 Series Track.

# TRU-ROLL 1000 & 1200 SERIES TAIL BLOCKS

RETURN TO NAVIGATION PAGE FOR TRACK SERIES:



STANDARD TAIL BLOCK 1003 Standard Tail Block with 5-1/2 inch Nylon sheave for 1000 Series Track.



8 INCH TAIL BLOCK 1003A Tail Block with 8 inch Nylatron sheave for 1000 Series Track.



STANDARD REAR-FOLD TAIL BLOCK

**1003RF** Standard Rear-Fold Tail Block for 1000 Series Track.



8 INCH REAR-FOLD TAIL BLOCK

1003RFA Rear-Fold Tail Block with 8 inch

Nylatron sheave for 1000 Series Track.

R-FOLD TAIL REVERSE R



REVERSE REAR-FOLD TAIL BLOCK

**1003RFR** Reverse Rear-Fold Tail Block for 1000 Series Track.



STANDARD TAIL BLOCK 1203 Standard Tail Block for 1200 Series Track.



HORIZONTAL TAKE-OFF TAIL BLOCK

**1203-2** Horizontal Take-Off Tail Block for 1200 Series Track.

# TRU-ROLL 2000 & 2200 SERIES TAIL BLOCKS

RETURN TO NAVIGATION PAGE FOR TRACK SERIES:



**STANDARD TAIL BLOCK** 2006 Standard Tail Block with Casting for 2000 Series Track. 2006A Tail Block without Casting.



ROOK

STANDARD TAIL BLOCK 2206 Standard Tail Block with Casting for 2200 Series Track.



TAIL BLOCK2206A Tail Block without Casting.

# TRU-ROLL TENSION BLOCKS & CORD

RETURN TO NAVIGATION PAGE FOR TRACK SERIES:



FLOOR MOUNTED TENSION BLOCK

**1010** Adjustable Floor Mounted Tension Block with 3/8 inch groove.



SPRING LOADED TENSION BLOCK

**1211** Floor Mounted Spring Loaded Tension Block with 1/4 inch groove. Used with Medium Duty Tracks.



# FLOATING TENSION BLOCK

**1009** Floating Tension Block with 1/2 inch groove.



### NYLON COATED AIRCRAFT CABLE

WRL-12 3/32" X 1/8" Coated Steel Cable. WRL-13 1/8" X 3/16" Coated Steel Cable. WRL-14 3/16" X 1/4" Coated Steel Cable.



SASH CORD SC-08 1/4" Diameter Sash Cord. SC-12 3/8" Diameter Sash Cord.



BELL CORD BC-08 1/4" Diameter Bell Cord. BC-12 3/8" Diameter Bell Cord.

# TRU-ROLL 1000 TRACK & HARDWARE



**TRACK 1001** Track Channel, galvanized streel. Available in 24 ft. & 30 ft. lengths.



RETURN TO NAVIGATION PAGE FOR TRACK SERIES:

**TRACK SPLICE HANGER** 1013S Track Splice Hanger.



LUG SPLICE 1050 Lug splice.



END STOP 1007 End Stop (pair) 3/8" bolt with spacer.



TRACK HANGER 1013 Intermediate Track Hanger



**CENTER HANGER 1011** Center Hanger with Idler.



2 HOLE TAB 8594 Two hole tab.



PIPE CLAMP 1015A 1-1/4" I.D. pipe clamp.



PIPE CLAMP 1015B 1-1/2" I.D. pipe clamp.



TUBE CLAMP 1015C 2" O.D. tube clamp.



**TUBE CLAMP 1015D** 1-1/4" O.D. tube clamp.



IDLER HANGER 1014 Hanger with 3/8" groove Idler.



LIMIT SWITCH MOUNT 1019 Limit switch hanger bracket.



**R. F. CENTER HANGER 1011RF** Rear-Fold Center Hanger with idler.



LIMIT SWITCH MOUNT 1019RF Rear-Fold limit switch hanger bracket.

TRU-ROLL 1200 TRACK & HARDWARE

RETURN TO NAVIGATION PAGE FOR TRACK SERIES:



TRACK

**1201** Black powder coated aluminum track channel. Available in 24 ft. and 30 ft. lengths.



SPLICE HANGER 1208S Splice Hanger.



END STOP 1207 End Stop.



END STOP & IDLER 1207I End Stop with Idler.



TRACK HANGER 1208 Intermediate Track Hanger.



**TRACK HANGER & IDLER** 1208I Track Hanger with Idler.



CENTER TRACK HANGER 1209 Center Hanger.

# TRU-ROLL 2000 TRACK & HARDWARE

RETURN TO NAVIGATION PAGE FOR TRACK SERIES:



**CENTER CASTING ASSEMBLY** 2001 Aluminum casting support, center with end cap.



INTERMEDIATE CASTING ASSY. 2002 Aluminum casting support, intermediate with end cap.



**END STOP** 2008 End Stop (pair.)



TRACK HANGER 2014 Track Hanger Bracket.



**TRACK C-CHANNEL** 8536 Track C-channel, 16 ga.



**TRACK TUBE** RST804 1-1/4" x .049" round steel for splicing.



**C-CHANNEL SPLICE** 2016 Track C-channel splice (pair.)



**CENTER ROLLER** 8124N Center roller, Nylon with bushing.



SIDE ROLLER 8125N Side roller, Nylon with bushing.



TUBE SPLICE 8920 Track tube splice, (pair.)



LIMIT SWITCH MOUNT 2015 Track mounted limit switch hanger bracket.



**COMPOUND PULLEY** 2011 5" compound pulley.



**MULE BLOCK** 2012 5" Mule block, double sheave.

# TRU-ROLL 2200 TRACK & HARDWARE

RETURN TO NAVIGATION PAGE FOR TRACK SERIES:



**CENTER CASTING ASSEMBLY 2201** Aluminum casting support, center with end cap.



END STOP 1212 End Stop (pair.)



**TRACK HANGER** 2214 Track Hanger Bracket.



**INTERMEDIATE CASTING ASSY. 2202** Aluminum casting support, intermediate with end cap.



TRACK C-CHANNEL 8536A Track C-channel. Sold in 20 ft. lengrths.



**TRACK TUBE RST805** 5/8" x .049" round steel tube, 20 ft. painted black & drilled for splicing.



**COMPOUND PULLEY** 2211 2-1/2" compound pulley.



C-CHANNEL SPLICE 2210 Track C-channel splice (pair.)



TUBE SPLICE 8925 Track tube splice, (pair.)



CENTER ROLLER 8122N Center roller, Nylon with bushing.



SIDE ROLLER 8123N Side roller, Nylon with bushing.



2215 Track mounted limit switch hanger bracket.

# TRU-ROLL 2300 TRACK & HARDWARE

RETURN TO NAVIGATION PAGE FOR TRACK SERIES:



**TRACK SUPPORT TUBE RST804** 1-1/4" x .049 inch round steel tube, painted black & drilled for splicing. Sold in 20 ft. lengths.



 TUBE CLAMP

 1015D 1-14 inch tube clamp.



**FLUSH MOUNT TUBE CLAMP** 8593 Flush mount 1-1/4 inch tube clamp.



 TUBE SPLICE

 8921 Tube splice for RST804 steel tube.



**TRACK C-CHANNEL** 8536A Aluminum track channel - sold in 20 foot lengths.



2 HOLE SIDE TAB 8592 2 hole side tab drilled for 1/4" bolts.



C-CHANNEL SPLICE 2210 Track channel splice (pair.)



END STOP 1212 Track end stop.



CHANNEL NUT 250CNZ-SQR Channel 1/4"-20 square nut.



SPACER 8200-0-10 Side tab spacer.

# TRU-ROLL 2500 TRACK & HARDWARE

RETURN TO NAVIGATION PAGE FOR TRACK SERIES:



**TRACK SUPPORT TUBE RST801** 2" x .049 inch round steel tube, painted black & drilled for splicing. Sold in 20 ft. lengths.



TUBE CLAMP 1015C 2 inch tube clamp.



2 HOLE SIDE TAB 8539-1 2 hole side tab drilled for 3/8" bolts.



 TUBE SPLICE

 8920 Tube splice for RST801 steel tube.



**TRACK C-CHANNEL 8536** Aluminum track channel - sold in 20 foot lengths.



**TRACK CHANNEL SPLICE** 2016 Track channel splice (Pair.)



END STOP 2008 Track end stop.



**TRACK CHANNEL NUT 8902** Track C-channel 3/8" nut.



SPACER 8202-1-00 Side tab spacer.

TRU-ROPLL ADDITIONAL TRACK HARDWARE

RETURN TO NAVIGATION PAGE FOR TRACK SERIES:



**3 HOLE CLAMP 8519-3** 3 hole clamp for 1-1/2 inch pipe.



I-BEAM HANGER BLC107-4 4 inch I-beam hanger. BLC107-6 6 inch I-beam hanger.



2 HOLE ANGLE CLIP 8591-3/8 Angle clip, for 3/8" bolts. 8591-1/2 Angle clip, for 1/2" bolts.



**3 HOLE ANGLE CLIP 8591-3-3/8** Angle clip, for 3/8" bolts. **8591-3-1/2** Angle clip, for 1/2" bolts.



**2 HOLE TWIST TAB 8596** 1-1/2" x 5" x .125" twist tab.



**2 HOLE TWIST TAB 8597** 1" x 3-1/2" x .125" twist tab.



TRANSITION 1001-2500 Track Transition. 1201-2300 Track Transition.



END CAP CAP108 Cap for 1-1/2 inch pipe.



**PIPE SPLICE** 8922 1-1/2 inch pipe splice.

# TRU-ROLL RIGGING HARDWARE





HEAD BLOCK 3806-S 6 line 12 inch headblock. Cast iron sheave with tapered roller bearing.



**COUNTERWEIGHT** 5011-18 18 pound & 5011-30 30 pound Flame cut steel counterweight for Tru-Roll counterweight arbors.



ROPE LOCK 5000CR Rail mount rope lock with cam roller and 11 inch coated handle



WIRE GUIDE ARBOR

5204 4 foot high counterweight arbor.5206 6 foot high counterweight arbor.5208 8 foot high counterweight arbor.



CLAMPING ARBOR LOCK NUT 5151-CL Two piece steel block allows installation without arbor disassembly.



**T-GUIDE ARBOR** 

5104 4 foot high counterweight arbor.5106 6 foot high counterweight arbor.5108 8 foot high counterweight arbor.



**COMBINATION TENSION BLOCK** 

**5081A** Combination adjustable tension block and rope lock for counterweight operating line.



T-GUIDE TENSION BLOCK 5080-C10 10 Inch Cast Iron Tension Block with Guides.

# TRU-ROLL RIGGING HARDWARE





LOFT BLOCK

**4080N** 8" x 1/4" groove loft Nylatron loft block with ball bearing.

**4080TB** 8" x 1/4" groove loft cast iron loft block with tapered roller bearing.



**UNDER-HUNG LOFT BLOCK** 

**4080UN** 8" x 1/4" groove underhung loft Nylatron loft block with ball bearing.

**4080UTB** 8" x 1/4" groove underhung loft cast iron loft block with tapered roller bearing.



2.5" SHEAVE, SIDE MOUNT PULLEY

**27** One line 2.5 inch side mount pulley. **27-2** Two line 2.5 inch side mount pulley. Also available for 3, 4, 5, & 6 lines. Please specify 1/4" or 5/32" groove.



2.5" SHEAVE, STAND UP PULLEY

**25** One line 2.5 inch stand up pulley. **25-2** Two line 2.5 inch stand up pulley. Also available for 3, 4, 5, & 6 lines. Please specify 1/4" or 5/32" groove.



28SM One line 5 inch side mount pulley.
28SM-2 Two line 5 inch side mount pulley. Also available for 3, 4, 5, & 6 lines. Supplied with 1/4"groove.



5" SHEAVE, STAND UP PULLEY
28 One line 5 inch stand up pulley.
28-2 Two line 5 inch stand up pulley. Also available for 3, 4, 5, & 6 lines.

Supplied with 1/4" groove.



**RIGHT ANGLE PIPE CLAMP 8926** Right angle pipe clamp with U-bolt.



FLOOR PLATE 31 Floor plate with D-ring.



IMPROVED HANGERS 46 Improved bottom hanger. 45 Improved top hanger.

# TRU-ROLL RIGGING HARDWARE RETURN TO NAVIGATION PAGE FOR TRACK SERIES:



**SCHEDULE 40 PIPE** 8550 1-1/2 inch schedule 40 pipe, painted black & drilled for splicing. Sold in 21 ft. lengths.



8599 Pipe grid cross-over pipe clamp with U-bolts.

**CROSS-OVER PLATE** 



# WALL MOUNT BRACKET

8923 4"x 4" wall mount with 1-1/2 inch pipe splice, 6 inches long.

**TRU-ROLL** CURTAIN TRACK SPECIFICATIONS

# TRACK BY TRU-ROLL™ - SPECIFICATIONS

Assemblies shall be TRU-ROLL Track. Individual specifications are as follows...

### No. 1000 Straight Track

Track channel shall be 14 gauge (2mm) roll-formed galvanized steel with drop flange construction. Supports for track shall be provided on 5'-0" (1524mm) centers. Track pulleys shall incorporate 5 1/2" (140mm) diameter, molded nylon 6/6 sheaves with ball-bearings and 11 gauge (3mm) cold-formed steel side plates. Master carriers shall be 4-wheel truck type with steel body unit. Track carriers shall be provided for standard (rear fold) operation, with a neoprene bumper at top of nylon 6/6 body to ensure automatic alignment with adjacent carriers. Carrier design shall incorporate fin guided bodies of molded nylon with a pair of neoprene-tired (ball-bearing nylon) wheels riveted parallel to the body. Carriers shall be furnished at 12" (305mm) on center, with heavy duty swivel and trim chain for drapery attachment. Floor block shall maintain proper tension on operating line of 3/8" (I0mm) diameter stretch-resistant bell cord with bronze wire center.

### No. 1200 Straight Track

Track channel shall be .075" (2mm) semi-hollow aluminum extrusion with drop flange construction. Track pulleys shall incorporate 1 7/8" (48mm) diameter, molded nylon 6/6 sheaves with ball-bearing axles and 14 gauge (2mm) cold-formed steel housings. Supports for track shall be provided on 4'-0" (1 21 9mm) centers. Track carriers shall be provided for standard operations, with a molded nylon bumper at top of carrier body to ensure automatic alignment with adjacent carriers. Master carriers shall be 4-wheel truck type with steel body unit. Carrier design shall incorporate fin-guided bodies with steel rivet axles. Carriers shall be furnished at 12" (305mm) on center, with heavy duty swivel and trim chain for drapery attachment. Floor block shall be spring loaded for proper tension. Operating line shall be 1/4" (6.4mm) diameter stretch-resistant bell cord with bronze wire center.

### No. 2000 Truss Track

Track construction shall consist of two (2) parallel I I/4" O.D. x .049 wall (32mm x I.2mm) steel tubing strongbacks, rolled to radii as specified. Carrier rails shall be parallel "C" channels, fabricated from galvanized 14 gauge (2mm) steel, concentrically roll formed to match strong-backs. Carrier rails shall be supported from tubing by precision aluminum castings spaced at 30" (762mm) maximum. Supports for track shall be provided on 5'-0" (I 524mm) centers. Master carriers shall be four wheel construction, with articulating pivot device joining two precision cast aluminum bodies. Nylon idling rollers shall be mounted within casting supports and maintain operating lines inside track envelope. Carrier design shall incorporate fin-guided nylon 6/6 bodies with neoprene-tired (ball-bearing nylon) wheels riveted parallel to the body. Track carriers shall include an integral neoprene bumper at top of body to ensure automatic alignment with adjacent carriers. Carriers shall be furnished at 12" (305mm) on center, with heavy duty swivel and trim chain for drapery attachment. Floor block shall provide proper tension on operating line of 1/4" (6.4mm) diameter nylon-coated wire rope (stretch-resistant bell cord with bronze wire center.)

### No. 2200 Truss Track

Track construction shall consist of two (2) parallel 5/8" O.D. x .049 wall (16mm x 1.2mm) steel tubing strongbacks, rolled to radii as specified. Carrier rails shall be parallel "C" channels, fabricated from .075" (2mm) aluminum extrusion, concentrically roll formed to match strong-backs. Carrier rails shall be supported from tubing by precision aluminum casting spaced at 24" (610 mm) maximum. Supports for track system shall be provided



on 4'-0" (1219 mm) centers. Master carriers shall be four wheel construction with precision cast aluminum bodies. Nylon idling rollers shall be mounted within casting supports and maintain operating lines inside track envelope. Carrier design shall incorporate fin-guided nylon 6/6 bodies with nylon wheels and steel axles. Track carriers shall include an integral nylon bumper at lop of body to ensure automatic alignment with adjacent carriers. Carriers shall be furnished at 12" (305mm) on center, with heavy duty swivel and trim chain for drapery attachment. Spring loaded floor block shall maintain proper tension on operating line of 3/16" (5mm) diameter nylon-coated wire rope.

## No. 2300 Cyclorama Track

Track strong-back shall be 1 1/4" O.D. x .049 wall (32mm x 1.2mm) steel tubing, roll-formed to specifications. Carrier rails shall be parallel "C" channels, fabricated from 14 gauge (2mm) aluminum extrusion, concentrically roll formed to match strong-back. Rail supports shall be spaced at no greater than 24" (610mm). Supports for track shall be provided on 4'-0" (1219 mm) centers. Master carriers shall be four wheel construction, with nylon-coated wire rope pull line and welded 3" (76mm) diameter steel ring at floor level for walk along operation. Carrier design shall incorporate fin-guided nylon 6/6 bodies with nylon wheels and steel axles, with molded nylon bumper at top of carrier body to ensure automatic alignment with adjacent carriers. Carriers shall be furnished at 12" (305mm) on center, with heavy duty swivel and trim chain for drapery attachment. End stops shall be installed at all open track ends to prevent leader over-travel.

## No. 2500 Cyclorama Track

Track strong-back shall be 2" O.D. x .049 wall (51 mm x 1.2mm) steel tubing, roll-formed to specifications. Carrier rails shall be parallel "C" channels, fabricated from galvanized 14 gauge (2mm) steel, concentrically roll formed to match strong-back. Rail supports shall be spaced at no greater than 30" (762mm). Supports for track shall be provided at 5'-0" (1524 mm) centers. Master carriers shall be four wheel construction with steel body, nylon-coated wire rope pull line, and welded 3" (76mm) diameter steel ring at floor level for walk along operation. Carrier design shall incorporate fin-guided, molded nylon 6/6 bodies, and neoprene tired (ball-bearing nylon) wheels riveted parallel to the body, and include an integral neoprene bumper at top of body to ensure automatic alignment with adjacent carriers. Carriers shall be furnished at 12" (305mm) on center, with heavy duty swivel and trim chain for drapery attachment. End stops shall be installed at all open track ends to prevent leader over-travel.

### No. 2900 Lift Curtain Rigging

Casting support shall be 2" O.D. x .049 wall (51 mm x 1.2mm) steel tubing, roll-formed to sizes as indicated. Supports for contour system shall be provided on 5'-0" (1524mm) centers. Lifting and mule-block sheave housings shall be precision aluminum casting with rated fasteners for attachment to tubing strong-back. Housing to include set screw to prevent rotation. Rigging sheaves shall be 2 1/2" (64mm) diameter, molded nylon 6/6 sheaves with ball-bearing axles. Lift-lines shall be independently muled around curved sections and leave tubing at a horizontal or vertical take-off pulley as required. Operation of lift-curtain shall be motorized, with lift lines individually terminated at a horizontal sliding arbor or cable guided clew as required. (Operation of lift-curtain shall be locking gear box with drill motor.) (Operation of lift-curtain shall be by hand crank winch.)