

# TECHNICAL INFORMATION

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## DRIVE SPECIFICATIONS

Model	Motor	Reducer	Main (Outer) Conveyor		Shafting (Head)	V-Belts
			Motor Sheave	Reducer Sheave		
T140-5	30Hp	TXT515	2Gr-5V-7.5	2Gr-5V-10.9	3 <sup>7</sup> / <sub>16</sub> x 73" long	(2) 5V-900
T140-8	40Hp	TXT615	2Gr-5V-9.75	2Gr-5V-10.3	3 <sup>7</sup> / <sub>16</sub> x 73" long	(2) 5V-900
T150-8	40Hp	TXT615	2Gr-5V-9.75	2Gr-5V-10.3	3 <sup>7</sup> / <sub>16</sub> x 73" long	(2) 5V-900
T150-10	40Hp	TXT615	2Gr-5V-9.75	2Gr-5V-10.3	3 <sup>7</sup> / <sub>16</sub> x 73" long	(2) 5V-900
T135-12	50Hp	TXT715	3Gr-5V-9.0	3Gr-5V-12.5	3 <sup>15</sup> / <sub>16</sub> x 81" long	(3) 5V-850
T135-15	60Hp	TXT815	3Gr-5V-9.0	3Gr-5V-11.3	3 <sup>15</sup> / <sub>16</sub> x 83 1/2" long	(3) 5V-850

Model	Motor	Reducer	Telescopic (Inner) Conveyor		Shafting (Head)	V-Belts
			Motor Sheave	Reducer Sheave		
T140-5	(2)7.5Hp	(2)TXT315	2Gr-5V-8.0	2Gr-5V-10.3	2 <sup>15</sup> / <sub>16</sub> x 68 <sup>5</sup> / <sub>8</sub> "	(4) 5V-670
T140-8	(2)10Hp	(2)TXT315	2Gr-5V-8.0	2Gr-5V-8.0	2 <sup>15</sup> / <sub>16</sub> x 68 <sup>5</sup> / <sub>8</sub> "	(4) 5V-670
T150-8	(2)10Hp	(2)TXT315	2Gr-5V-8.0	2Gr-5V-8.0	2 <sup>15</sup> / <sub>16</sub> x 68 <sup>5</sup> / <sub>8</sub> "	(4) 5V-670
T150-10	(2)15Hp	(2)TXT415	2Gr-5V-8.5	2Gr-5V-10.3	2 <sup>15</sup> / <sub>16</sub> x 68 <sup>5</sup> / <sub>8</sub> "	(4) 5V-670
T135-12	(2)15Hp	(2)TXT415	2Gr-5V-8.5	2Gr-5V-10.3	3 <sup>7</sup> / <sub>16</sub> x 79 1/4"	(4) 5V-710
T135-15	(2)20Hp	(2)TXT515	2Gr-5V-8.5	2Gr-5V-9.25	3 <sup>7</sup> / <sub>16</sub> x 79 3/4"	(4) 5V-710

## BELTING & PULLEY SPECIFICATIONS

Model	Main (Outer) Conveyor		Head Pulley	Tail Pulley
	Belting	Belt Speed		
T140-5	Goodyear 36"x170ft 330PIW 3 Ply	350FPM	16"Øx38" Dia. lag	14"Øx38"
T140-8	Goodyear 36"x170ft 330PIW 3 Ply	484FPM	16"Øx38" Dia. lag	14"Øx38"
T150-8	Goodyear 36"x178ft 330PIW 3 Ply	484FPM	16"Øx38" Dia. lag	14"Øx38"
T150-10	Goodyear 36"x178ft 330PIW 3 Ply	484FPM	16"Øx38" Dia. lag	14"Øx38"
T135-12	Goodyear 42"x174ft 375PIW 3 Ply	452FPM	20"Øx44" Dia. lag	18"Øx44"
T135-15	Goodyear 42"x174ft 375PIW 3 Ply	511FPM	20"Øx44" Dia. lag	18"Øx44"

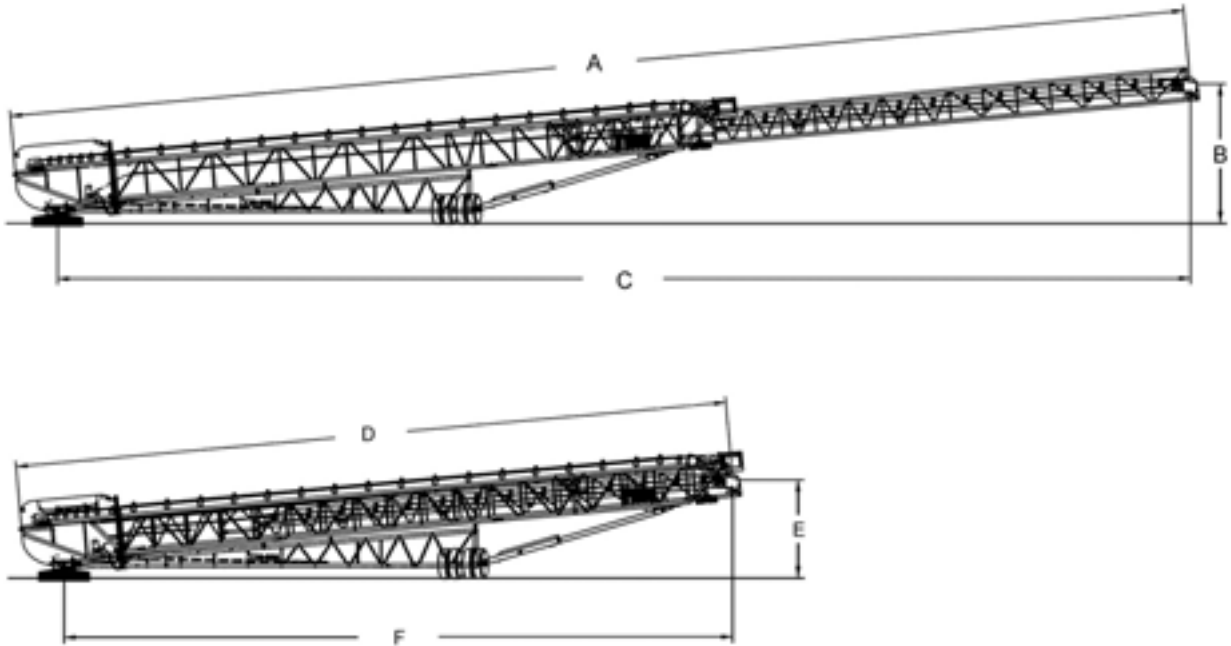
Model	Telescopic (Inner) Conveyor		Head Pulley	Tail Pulley
	Belting	Belt Speed		
T140-5	Goodyear 36"x123ft 330PIW 3 Ply	381FPM	16"Øx38" Dia. lag	14"Øx38"
T140-8	Goodyear 36"x123ft 330PIW 3 Ply	526FPM	16"Øx38" Dia. lag	14"Øx38"
T150-8	Goodyear 36"x135ft 330PIW 3 Ply	526FPM	16"Øx38" Dia. lag	14"Øx38"
T150-10	Goodyear 36"x135ft 330PIW 3 Ply	526FPM	16"Øx38" Dia. lag	14"Øx38"
T135-12	Goodyear 42"x117ft 375PIW 3 Ply	469FPM	18"Øx44" Dia. lag	16"Øx44"
T135-15	Goodyear 42"x117ft 375PIW 3 Ply	525FPM	18"Øx44" Dia. lag	16"Øx44"

## COMPONENT OVERVIEW

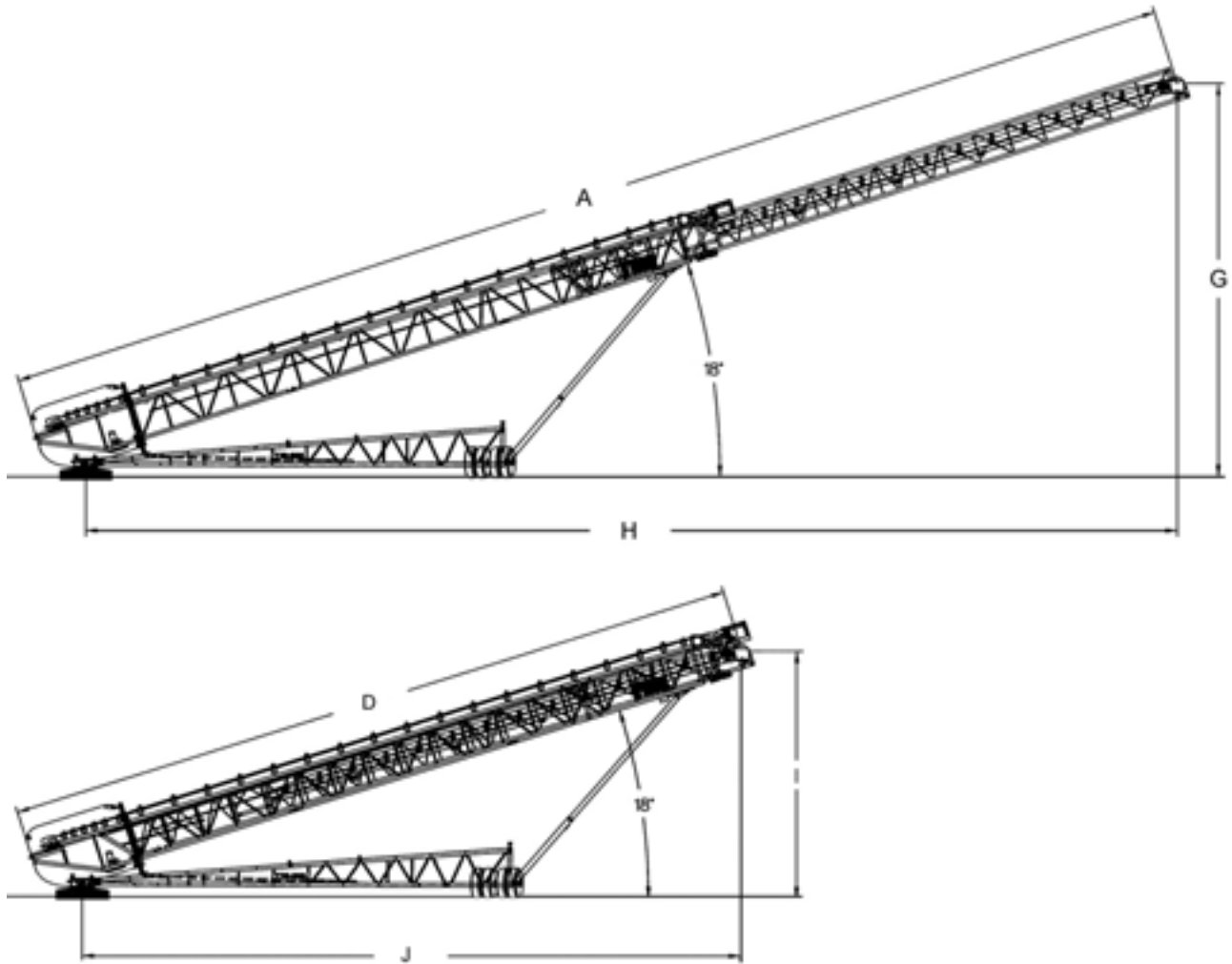
<b>Main (Outer) Truss Frame</b>	Main “outer” frame is constructed from heavy structural angle. Main Chord – 6” x 4” x $\frac{5}{16}$ ” Bracing – 2” x 2” x $\frac{1}{4}$ ”
<b>Telescopic (Inner) Truss Frame</b>	The extendible “inner” lattice truss is manufactured using hollow structural steel (HSS). Main Chord – 4” x 2” x $\frac{1}{4}$ ” & 4” x 2” x $\frac{3}{16}$ ” Bracing – 1” x 1” x $\frac{1}{8}$ ”
<b>Hydraulic Undercarriage</b>	The forward support frame is constructed of HSS steel tubing. The forward support is hydraulically raised and lowered.
<b>Tail Undercarriage</b>	The rear support frame of the 36” to 42” models are fabricated from heavy structural steel (HSS).
<b>Transport Axle</b>	The axle is a specially designed outrigger style framework with 8 radial tires mounted onto standard 10 stud hub and transportation/truck spindles, bearings, wheels equipped with air actuated brakes. An auxiliary (tag) axle is included where required by law for road restrictions.
<b>Radial Axle</b>	The conveyor mid section is hydraulically raised to allow the wheels to swing from travel mode to radial position. Wide wheel base in radial position offers great stability during operation while the closed travel position allows for safe highway transportation. Wheel base dimensions can be found in the subsequent drawings.
<b>Radial Axle Wheel Drive</b>	Wheel drive utilizes a 1.5 HP Parallel Helical Gear Motor assembly (15,800lb-in torque).
<b>Pulleys</b>	All pulleys are welded steel, crown faced, secured by X.T.H. hubs. On all drive pulleys are high strength, distortion free, precision ground steel shafts.
<b>Troughing Idlers</b>	Both the main conveyor and the telescopic conveyor utilize modified CEMA C, 5” $\varnothing$ steel idlers with 35 degree troughs.
<b>Loading Point Idlers</b>	The main conveyor utilizes modified CEMA C, 5” $\varnothing$ steel idlers with 20 degree troughs.
<b>Return Idlers</b>	CEMA C 5” rubber disc returns.

<b>Conveyor Belting</b>	Goodyear premium quality, high tensile strength, to support the load and the designed horsepower. Standard covers are $\frac{3}{16}$ " x $\frac{1}{16}$ " 3 ply with vulcanized splice.
<b>Electrical Panel</b>	NEMA 4 (weather-proof) enclosure with 575V/460V, 3 phase, 60 Hz, Allen Bradley starters.
<b>Automation</b>	The unit can be fully automated or manually operated with the use of an Allen Bradley SLC 500 series processor, ultrasonic sensors and inductive proximity sensors. A Cutler Hammer touch screen allows the operator to input all variables and parameters for the desired stockpile.
<b>Telescopic Extend/Retract</b>	Telescopic action is activated by an 8 $\frac{5}{8}$ " dia drum (1.5 HP motor) and $\frac{9}{16}$ " cable winch package which moves the conveyor approximately 9.4 FPM (17,584 lb.-in, 3910lb pull).
<b>Winch Ratchet System</b>	This system utilizes the PLC to constantly monitor the tension of the winch cables to ensure against breakage.
<b>Load Equalizing System (L.E.S.)</b>	This patented system is exclusive to the ThorStack and is designed to handle the constantly changing loads as the inner conveyor extends and retracts.
<b>Undercarriage</b>	A 7.5 HP motor powers a 4 gal/min gear pump at 3000 psi to raise or lower the hydraulic cylinders.
<b>Loading Hopper</b>	Stone box, or tapered chute, 46" wide x 7' long, fabricated from $\frac{1}{4}$ " plate with flashing of UHMW Polypropylene plastic.
<b>Transport Hitch</b>	King-pin, counterweight and side plate assemblies are designed to allow ample turning clearance for most 5 <sup>th</sup> wheel tractors.
<b>Guarding</b>	Safety guards at all pinch points and galvanized steel mesh (on main conveyor) are standard.
<b>Belt Scraper</b>	"Thor" twin-edge belt cleaners are situated at the discharge end on both conveyors, cleaning the drive head pulley below the tangent point of the head pulley. Manufactured from long wearing, tough $\frac{3}{4}$ " thick 10" wide urethane blade c/w extension spring.

## CONVEYOR DIMENSIONS

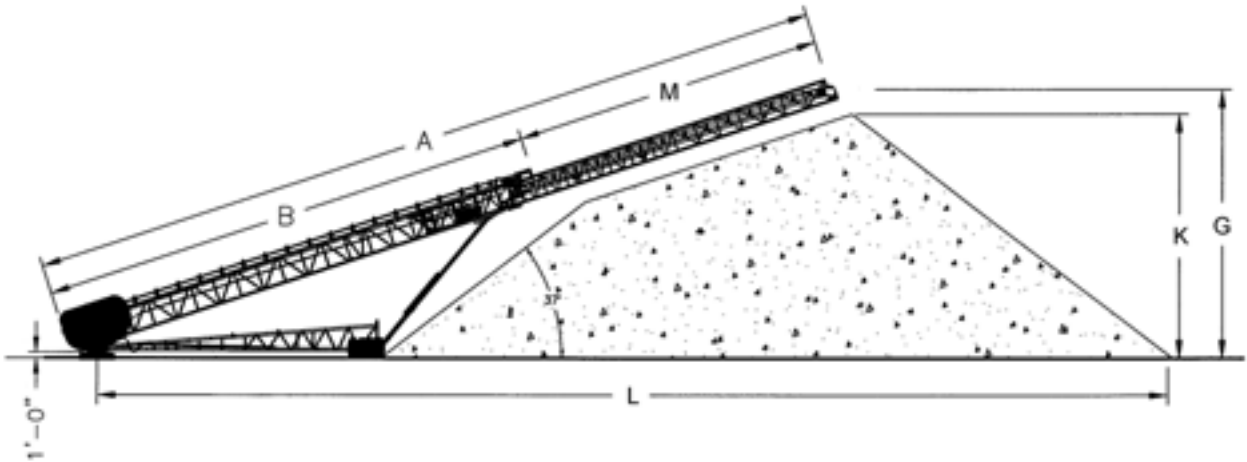


Model	A	B	C	D	E	F
T140-5	140' - 2"	16' - 8"	134' - 8"	84" - 9"	11' - 6"	79' - 6"
T140-8	140' - 2"	16' - 8"	134' - 8"	84" - 9"	11' - 6"	79' - 6"
T150-8	150' - 0"	16' - 5"	144' - 7"	88" - 6"	11' - 4"	83' - 4"
T150-10	150' - 0"	16' - 5"	144' - 7"	88" - 6"	11' - 4"	83' - 4"
T135-12	135' - 0"	16' - 5"	127' - 9"	84" - 11"	12' - 0"	79' - 8"
T135-15	135' - 0"	16' - 5"	127' - 9"	84" - 11"	12' - 0"	79' - 8"



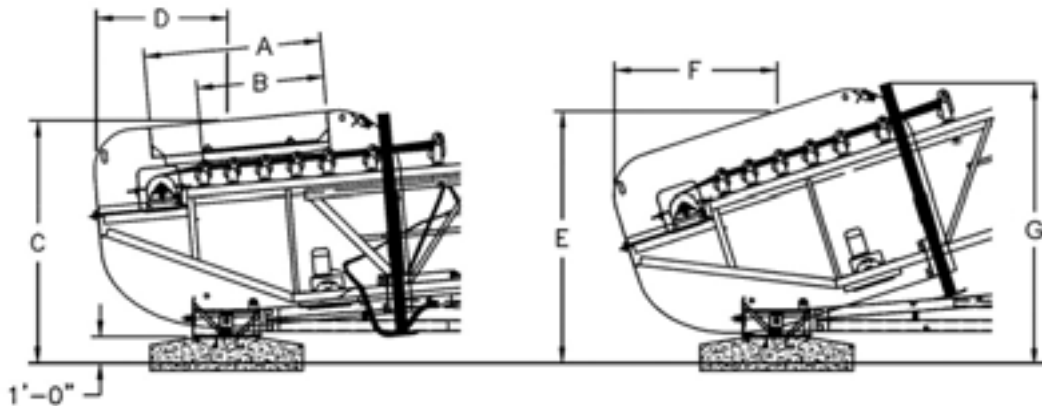
Model	A	D	G	H	I	J
T140-5	140' - 2"	84' - 9"	46' - 3"	127' - 11"	29' - 6"	76' - 5"
T140-8	140' - 2"	84' - 9"	46' - 3"	127' - 11"	29' - 6"	76' - 5"
T150-8	150' - 0"	88' - 6"	53' - 11"	135' - 8"	32' - 11"	77' - 10"
T150-10	150' - 0"	88' - 6"	53' - 11"	135' - 8"	32' - 11"	77' - 10"
T135-12	135' - 0"	84' - 11"	44' - 7"	123' - 1"	29' - 8"	77' - 2"
T135-15	135' - 0"	84' - 11"	44' - 7"	123' - 1"	29' - 8"	77' - 2"

\* Dimensions for T150-8 & T150-10 based on 20° incline



Model	A	B	G	K	L	M
T140-5	140' - 2"	86' - 2"	46' - 3"	42' - 0"	186' - 9"	54' - 0"
T140-8	140' - 2"	86' - 2"	46' - 3"	42' - 0"	186' - 9"	54' - 0"
T150-8	150' - 0"	88' - 6"	53' - 11"	51' - 5"	201' - 6"	61' - 6"
T150-10	150' - 0"	88' - 6"	53' - 11"	51' - 5"	201' - 6"	61' - 6"
T135-12	135' - 0"	84' - 11"	44' - 7"	41' - 6"	182' - 2"	50' - 1"
T135-15	135' - 0"	84' - 11"	44' - 7"	41' - 6"	182' - 2"	50' - 1"

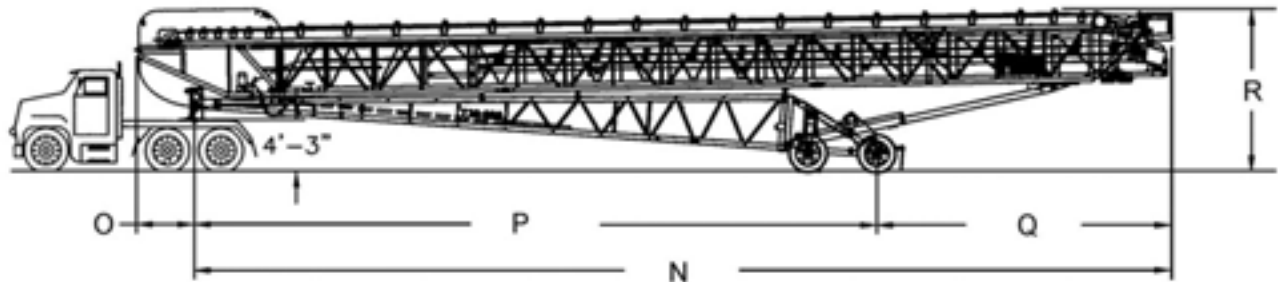
\* Dimensions for T150-8 & T150-10 based on 20° incline



Model	"A" Stone Box	"B" Chute Opening	C	D	E	F	G
T140-5	7' - 0"	5' - 0"	9' - 4"	5' - 4"	9' - 7 1/2"	6' - 3 1/2"	11' - 0 1/2"
T140-8	7' - 0"	5' - 0"	9' - 4"	5' - 4"	9' - 7 1/2"	6' - 3 1/2"	11' - 0 1/2"
T150-8	7' - 0"	5' - 0"	9' - 4"	5' - 4"	9' - 7 1/2"	6' - 3 1/2"	11' - 0 1/2"
T150-10	7' - 0"	5' - 0"	9' - 4"	5' - 4"	9' - 7 1/2"	6' - 3 1/2"	11' - 0 1/2"
T135-12	7' - 0"	5' - 0"	9' - 4"	5' - 4"	9' - 8"	6' - 5 1/2"	11' - 1"
T135-15	7' - 0"	5' - 0"	9' - 4"	5' - 4"	9' - 8"	6' - 5 1/2"	11' - 1"

## TRANSPORTATION SPECIFICATIONS

### Transport Dimensions

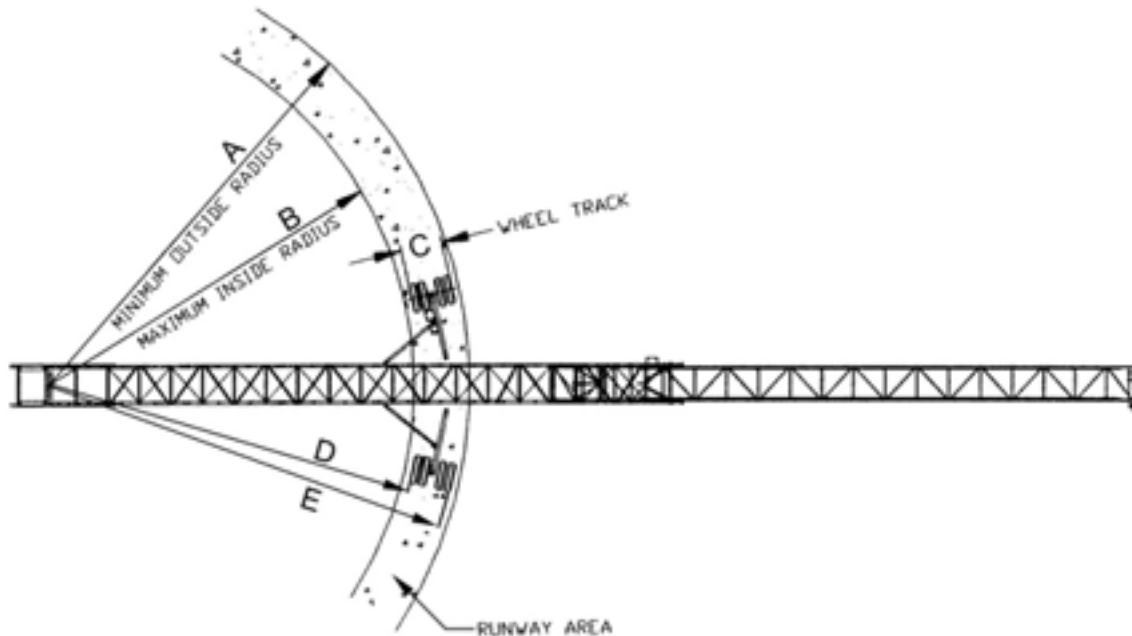


Model	N	O	P	Q	R
T140-5	81' - 5"	5' - 0"	56' - 10"	24' - 6"	13' - 6"
T140-8	81' - 5"	5' - 0"	56' - 10"	24' - 6"	13' - 6"
T150-8	86' - 3"	5' - 0"	62' - 9"	23' - 6"	13' - 9"
T150-10	86' - 3"	5' - 0"	62' - 9"	23' - 6"	13' - 9"
T135-12	81' - 6"	5' - 0"	56' - 11"	24' - 7"	13' - 11"
T135-15	81' - 6"	5' - 0"	56' - 11"	24' - 7"	13' - 11"

### Transport Weights (Approx. Weights Only)

Model	At King Pin	Stacker Axles	Total Weight
T140-5	17,000 lbs.	28,583 lbs.	45,583 lbs.
T140-8	17,000 lbs.	28,583 lbs.	45,583 lbs.
T150-8	17,900 lbs.	28,650 lbs.	46,550 lbs.
T150-10	17,900 lbs.	28,650 lbs.	46,550 lbs.
T135-12	19,000 lbs.	36,500 lbs.	55,500 lbs.
T135-15	19,000 lbs.	36,900 lbs.	55,500 lbs.

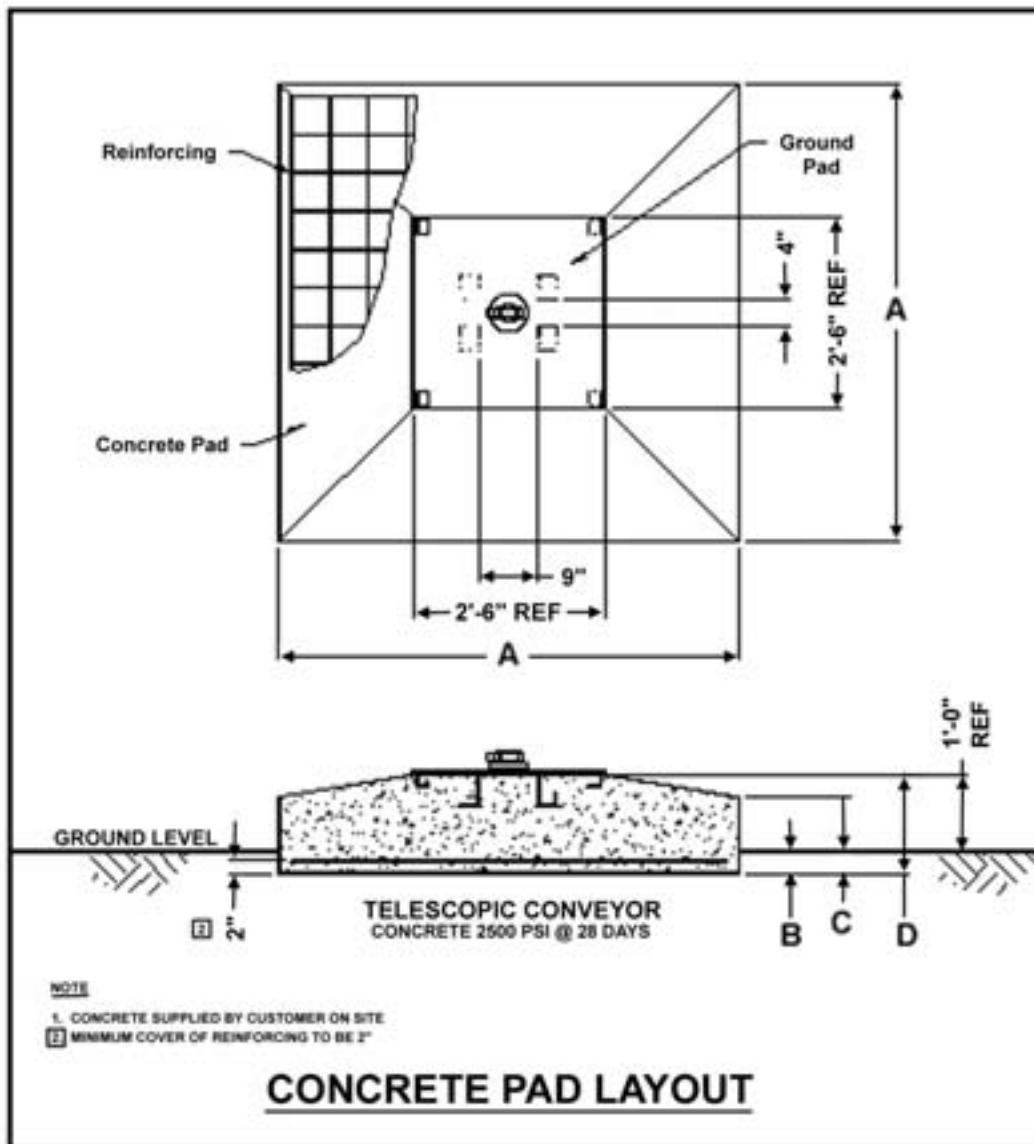
## RUNWAY DIMENSIONS



Model	A	B	C	D	E
T140-5	51' - 10"	44' - 10"	5' - 3"	45' - 9"	50' - 11"
T140-8	51' - 10"	44' - 10"	5' - 3"	45' - 9"	50' - 11"
T150-8	57' - 8"	50' - 7"	5' - 3"	51' - 6"	56' - 9"
T150-10	57' - 8"	50' - 7"	5' - 3"	51' - 6"	56' - 9"
T135-12	51' - 10"	44' - 10"	5' - 3"	45' - 9"	50' - 11"
T135-15	51' - 10"	44' - 10"	5' - 3"	45' - 9"	50' - 11"

### Runway:

- Must be a minimum of 7'-0" wide.
- Must be kept clear of build-up and debris
- Recommended to be made of poured concrete
- Must be level and smooth.



Model	A	B	C	D
T140-5	6' - 0"	3 ½ "	1' - 0"	1' - 3 ½ "
T140-8	6' - 0"	3 ½ "	1' - 0"	1' - 3 ½ "
T150-8	7' - 0"	3 ½ "	1' - 0"	1' - 3 ½ "
T150-10	7' - 0"	3 ½ "	1' - 0"	1' - 3 ½ "
T135-12	8' - 0"	7 ½ "	1' - 4"	1' - 3 ½ "
T135-15	8' - 0"	7 ½ "	1' - 4"	1' - 3 ½ "

\*Concrete anchor pad required by customer

Capacity is based on 3" minus aggregate material at 100lbs/ft<sup>3</sup>. All specifications and descriptions are accurate at the time of printing. Because improvement is a constant goal at Thor, we reserve the right to make changes in specifications at any time without notice and without obligation. July 2003