



BOTTOM RAILS

DOOR PANELS

REAR END
DOOR FRAME

DOOR(S)

HEADER

Hale Trailer Brake & Wheel 200194 & 200195



		and the second
ITEM	DESCRIPTION	
TYPE	ALUMINUM INSULATED VAN.	
APPLICATION	GALVANIZED SEE SECTION	
DIMENSIONS	Medium box.	
DIMENSIONS		
LENGTH	44'-0"	
WIDTH	102 3/8" (2600 mm)	
HEIGHT	13'-6 3/16" coupler height: 48"	
DROP HEIGHT	*** 8" ***, located at 117 3/8" from front	
EXTERIOR DROP	1" drop ahead of landing gear span with 3" coupler.	
SUB-STRUCTURE		
KING PIN LOCATION	24" from front. (600 mm)	
APPROACH PLATE	3/8" thick, reinforced with inverted "G" shaped steel plates.	
COUPLER PLATE	3/8" thick, extends 14" behind king pin, 19 000 kgs capacity.	
CROSSMEMBERS	4 formed hat shaped steel plates between coupler plate and span of landing	
	gear, I beams, 4" @ 3.64 lbs/ft, 80 000 psi steel, 12" center to	
	center.	
ADDITIONAL CROSSMEMBERS	See details at bottom.	
REAR EXTENSION	2 formed hat shaped full width.	
HOLE AT FRONT	Black plastic tubing through coupler and first crossmembers,	
	for fuel line.	
ADDITIONAL CROSSMEMBERS	Qty: 4 above bogie, (6" c/c starting at rear).	
FRONT WALL	Type: "G" (5" radius corners).	
PANELS	Stainless steel mirror finish, no paint.	
POSTS	Qty: 6, 4 aluminum 1 3/4" deep and 1 each end, integrated to	
	aluminum front corners.	
FASTENERS	3/16" stainless steel rivets, 4" c/c and 2" c/c on joints.	
FRONT CORNERS	Double sheating, 20 gauge stainless steel mirror finished on the outside	
	and unpolished aluminum extrusions.	
FRONT SILL	Aluminum extrusions, unpolished.	
	Including steel nose ramp, 2 1/2" x full width angle.	
	with one coat black latex primer.	
SIDE WALLS	Aluminum	
PANELS	Prepainted white aluminum (.049 thick).	
POSTS	+29 mm, 16 gauge, galvanized steel 80 psi., 12" c/c full length.	
FASTENERS	3/16" aluminum rivets, 4" c/c and 2" c/c on joints.	
TOP RAILS	7 1/2" high, aluminum extrusions, unpolished, with interior flange to support	
	meat rail rienforcement brace. With kemlite strips on interior flange for	
	supports. Application meat rails.	
DOTTON DAME		

9" high, aluminum extrusions, unpolished.

Reinforced, 4" x 4" x 1/4" with uprights 4" x 2" x 1/4"

3/4" plymetal doors, stainless steel outside, mirror finished, no paint.

Stainless steel, for barn doors.

Application meat rails.

Double, swing type with dual seals.



SUB PAN



ITEM	DESCRIPTION
DOOR LATCH(S)	Double locks (one extra on each barn door), by Power-Brace.
	(application meat rail with keeper H.V duty)
HINGES	3 hinges, made of aluminum by Manac, 365mm high ilo standard.
	Application meat rails.
DOOR HOLDBACKS	Rod and ring type LASH with chain, All stainless steel.
DOOK HOLDBACKS	Including stabilizing rubber stoppers.
DOOD ED AME DUMBED	
DOOR FRAME BUMPER	2 small rubber bumpers with 2 holes.
BUMPER	CMVSS 223-RIG approved (in accordance with Canada & USA regulation).
	Stainless steel, formed steel uprights, bolted to rear sill,
	cross bar made of 4" square steel tubing.
	Tail lights installed in rear sill.
HINGE PROTECTORS	3/8" steel plate, located between the first 3 hinges of bottom,
	with one handle each side included.
LICENCE PLATE	Located:at center back up 3" towards the front
BUMPER	Giron safety-tread aluninum installed on bumper cross bar.
BUMPER	With "K" bracing, between formed steel uprights and bottom cross bar.
	For stainless steel door frame.
BUMPER	Holes ready for 4 extra lights cut in an plate.
Domi Liv	between bumper uprights and the bumper tubing.
	between bumper uprights and the bumper tubing.
ROOF	One piece .040 thick aluminum riveted at 1 1/2" c/c on sides and
	1" c/c at ends.
BOWS	1 1/8" high, I-shaped aluminum bows located at 16" c/c
20113	and bonded to roof with glue.
ROOF	Roof reinforcement beams for meat rails. Qty: 25, for 48 ft van (starting fro
ROOI	rear, 1st at 8" from interior of rear doors, 2nd & 3rd @ 14"-14" from 1st row
	and 24" c/c for the others with 5 single attachments @ 5 1/2" (bolts 5/8")
	Meat rails supplied by customer. 2 channels 3" @ 4.1 lb/pi., primed.
	Warning 5 rows drawing need to be approved.
FINISH ANGLE	Plastic trim angle, at top of side wall(s) on each side, full lenght.
INSULATION	Fresh product.
FRONT WALL	4" thick urethane.
FRONT INTERIOR LINER	ArmorTuf-NXT, .075" thick, glued.
FRONT BULKHEAD	5/8" thick x 12 1/2" high, black recycled plastic. Edges beveled and fastened
FRONT BULKHEAD	
	on interior liner. Smoot steel 1/8" x 4 1/2" welded to coupler,
	installed between kickplate and interior liner.
OPENING AND REINFORCEMENT	Reefer: Carrier, **** Precedent C-600 ****
REAR DOOR(S)	2 1/2" thick solid urethane.
	Manac interior Pillow seal.
REAR DOOR(S)	
DOOR(S) LINER	Stainless steel mirror finish, no paint.
	66D request #20607.
FRONT BULKHEAD	5/8" thick x 12 1/2" high, black recycled plastic. Edges beveled and fastened
	on interior liner of rear door.
FLOOR	+No solid insulation on floor.
FLOOR	+2" thick urethane,
	1" above crossmembers and 1" between crossmembers.

Polar X, .033" thick.



LED ADDITIONAL MARKERS

TAIL LIGHTS



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ITEM	DESCRIPTION	
REEFER FLOOR	Flat type, inverted "T", 1 5/16" (33.5mm) high with sides 75mm high,	
	fully welded, and installed over plastic furrings on each crossmember.	
INSERTS	Aluminum inserts for inverted "T" flat floors.	
	quantity: 27, 60" long.	
DRAINS FOR FLOOR	Install 2 drains at front at floor level and 2 drains at rear in a sump,	
	with Kazoo	
DRAINS	Install 2 drains with Kazoo at rear in a sump,	
ROOF	4 1/2" thick urethane.	
ROOF LINER	ArmorTuf-NXT, .075" thick, fastened with steel pop rivets.	
SIDE WALLS	1 1/2" thick urethane.	
INTERIOR LINER	ArmorTuf-NXT, .075" thick, glued.	
KICK PLATES	Tamor and Total Total and Signature	
KICK PLATE	5/8" thick x 12 1/2" high, black recycled plastic. Edges beveled and	
	fastened with recessed pop rivets.	
LOAD RESTRAINTS	+Cargowall #1250E, "E" type, 6 slots per foot, galvanized steel.	
EOAD RESTRAINTS	Installed on top of interior lining. N.B.: Never use for double decking.	
	(4) Row(s), 8 ft long on upper deck side wall. 18", 42", 66", 90" c/c from	
	floor. See approve drawing.	
	11001. See approve drawing.	
CARGO CONTROL	+Cargowall #1250E, "E" type, 6 slots per foot, galvanized steel.	
CARGO CONTROL		
	Installed on top of interior lining.	
	N.B.: Never use for double decking.	
	(4) Row(s), front wall. loc same as side walls.	
	Front panel not cut. No insulation and no interior liner.	
	N.B.: Bolts for reefer installed	
ALUMINUM FLOOR	Anti-skid on inverted T floor.	
ELECTRICAL		
CONNECTOR PLATE	Raised, aluminum formed plate.	
FRONT CONNECTOR	7 way with circuit breakers (SAE J560), Phillips brand,	
	located road side.	
FRONT ADD. CONNECTOR	7 way (ISO 3731), for auxiliary functions only.	
ELECTRICAL SYSTEM	Shock proof lights, polycarbonate lenses, in compliance with CMVSS 108.	
MAIN SYSTEM	Grote Ultra Blue LED, sealed beams, rear lights and markers (2 1/2" dia.)	
	with stainless steel rings and anti-theft system. (tail lights with male	
	pins #53252 (10 diodes), markers #47122,47493, clearance lights #47092,	
	licence light.	
FLASHERS	Sealed beams LED, one lamp including side marker and	
	flasher each side at middle point, amber.	
DOME LIGHT	Three dome lights (Grote #63061), recessed, WITH switch at rear curb side	
	24" from floor.	
TAIL LIGHTS	Sealed beams, red, (Grote LED #53252), stainless steel rings.	
17.02 2.01110	Qty: 1 additionnal each side. (10 diodes)	
	From outside, tail light and flasher, flasher with parking,	
	brake with parking.	
ADDITIONAL MARKERS		
ADDITIONAL MARKERS	Sealed beams (Grote LED #47092,93), Qty: 16 additionnal each side, evenly	

spaced, on top and bottom rails.

Sealed beams (Grote LED #47092), Qty: 2 Located at: one each side on top rear door frame.

Sealed beams, red, (Grote LED #53252). Qty: 4 (10 diodes)



AIR VALVES

VALVE



ITEM	DESCRIPTION
11 = 101	Located: on plate between bumper uprights.
	From outside, (1) tail light and flasher,
	(2) tail light with brake between at center
ANDING GEAR	Holland, Mark V (LGH-3C313), heavy duty.
	Sand shoes 12" x 11 1/2" solid axles.
SAND SHOES	12" x 11 1/2", solid axles.
CRANK	Holland, Mark V (LGS-3C115-CS442), With mounting plate, inverted gearbox,
	Road side crank on a drop van.
SPAN	3/16" formed steel, reinforced, galvanized.
BOGIE	Fixed, for 72" spread tandem air ride suspension.
TRACKS	Not required.
FRAME	
ADDITIONAL FRAME	Additional sub frame, 6" frame height up to front landing gear.
BOGIE	Fixed, (1/4" 50W) thick steel, C-shaped frame construction, bolted connection
MECHANICAL	
SUSPENSION	Hendrickson INTRAAX disc brake AANT-23K, tandem, 122" spread.
	N.B.: Wingless narrow suspension bracket.
	For axles with bearings HM 518445.
	(Knorr/Bendix)
AIR LIFT	Hendrickson "UBL, bolted (removable) and galavanized,
	with air system Manac.
	Quick and brake release valves on air lift included.
	Located: front axle.
SPRINGS	Air.
AXLES	LDA, 5 3/4" diameter, 23 000 lbs. capacity.
SPIDERS	Welded.
TRACK	77 1/2".
DUST SHIELDS	Steel, clamped.
BRAKES	Disc brake Bendix (Knorr) ADB22X, lining Jurid 539.
BEARINGS	HM 518445.
SEALS	Federal Mogul with "Gearlube" mineral oil SAE 80W90.
BRAKE CHAMBERS	Knorr/Bendix 18/24
HUBS AND DRUMS	Disc brake Knorr/Bendix. "long stud"
RIMS	Alcoa, aluminum, half inside polished (Dura-Bright) and half
	"LvL ONE" finish, 22.5 x 8.25, disc (10 holes), 285.75mm B.C.,
	single flange nuts.
SPACERS	Wheel guard 10 holes. Located between the inside wheel and the drum and
	between two wheels.
TIRES	Continental, 255/70 R 22.5 HSR2 SA 16 ply (36.6")
AIR SYSTEM	
GLAD HANDS	Fixed, bolted.

Meritor Wabco, ABS, 4 sensors 2 modulators.

Manual blow down valve wired *** through add. 7 way at front ***





ITEM	DESCRIPTION
	with auto-reset feature,including Glycerin filled pressure gauge, in P.S.I.,
	to indicate load with a conversion table.
CONTROL BOX	Stainless steel.
CONTROL BOX	Located by the side rail, road side.
	Fixed sub-frame)
VALVE (HEIGHT CONTROL)	Add on of a second levelling valve which allows to adjust the ride height of
	the suspension at his maximum (override). Valve selector installed
	in the control box.
AIR TANK	Aluminum.
	(tandem)
CONTROL	Lift axle activated from cab.
	Used RED circuit of the ISO connector.
	(Application: U.S.A)
ACCESSORIES	
REGISTRATION HOLDER	One plastic, Betts-PS-1 or equivalent.
MUD FLAPS	One set, rubber with Manac logo and vertical grooves to reduce spray.
INSIDE DROP	Dummy drop inside van to accomodate pallet jack. anti-skid. Welded.
INOIDE DROI	Full width, 3ft long.
	No Demande de Soum: 20610
	No_Demande_de_Count. 20010
FINISHING	
UNDERCARRIAGE	One coat black undercoating.
	(excluded galvanized sections)
HUBS	Black.
WHEELS OR RIMS	Natural.
RETROREFLECTIVE TAPES	Conspicuity striping in compliance with CMVSS 108.
	Gray and red, 2' segments at bottom of each side wall.
	Fully covers bottom of rear doors and horizontal underride protection bar.
	2 segments of gray tape at each upper corner.
ANNEX(ES) ATTACHED	
R	ref: 181729, 188037, 162376
	161. 161726, 166661, 162676
GALVANIZED CHOICES	Galvanized choices.
COUPLER	Galvanized coupler.
CROSSMEMBERS	I beams, 4" @ *3.64* lbs/ft, 80 000 psi steel, 12" center to center,
	galvanized.
ADDITIONAL CROSSMEMBERS	Qty. 4, price for galvanized only.
REAR EXTENSION	Galvanized rear extension.
BOGIE	Fixed, tandem, galvanized steel.
	(Applicable for Manac bogie only)
ADDITIONAL FRAME	Galvanized additional sub frame.
INTERIOR DROP PLATE	Galvanized interior drop plate.
CONFORMITY	This semi-trailer does not comply with GHG regulations. Should GHG
	regulations come into force prior to the production of the trailer(s),
	Manac will have the obligation to ensure the trailer(s) produced meet
	minimum GHG guidelines. Any modifications required to meet the GHG
	regulations will be added to the initial purchase price and charged back to the customer.
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