

**Bid Document**

<b>Bid Details</b>	
Bid End Date/Time	12-02-2019 13:00:00
Bid Life Cycle (From Publish Date)	90 (Days)
Bid Offer Validity (From End Date)	50 (Days)
Ministry/State Name	Ministry Of Railways
Department Name	Na
Organisation Name	N/a
Office Name	Western Railway
Total Quantity	27
Item Category	Modular Toilet
MSE Exemption For Years Of Experience And Turnover	No

**Modular Toilet ( 27 )**

**Technical Specifications**

[\\* As per GeM Category Specification](#)

<b>Specification</b>	<b>Specification Name</b>	<b>Values</b>	<b>Allowed Values</b>
GENERIC	Mode of Supply	Knocked Down To Be Assembled At Consignee Site By The Seller	*
	<b>Number of Compartments</b>	1 - seater modular toilet	1 - seater modular toilet, 2 - seater modular toilet, 3 - seater modular toilet, 4 - seater modular toilet, 6 - seater modular toilet, 8 - seater modular toilet, 10 - seater modular toilet
	<b>Type of WC</b>	Indian with ceramic pan	Indian with ceramic pan, Indian with SS pan, Indian with FRP pan, Indian FRP pan with integrated

		facility(With FRP floor), European with ceramic pan, European with SS pan
Number of WC	1	*
Number of Bathrooms	0	*
Number of Urinals	0	*
<b>Water facility</b>	By mean of overhead tank(Capacity 200Ltrs)	By mean of overhead tank(Capacity 200Ltrs), By mean of overhead tank(Capacity 300Ltrs), By mean of overhead tank(Capacity 500Ltrs), By mean of overhead tank(Capacity 750Ltrs), By mean of overhead tank(Capacity 1200Ltrs), with running water connection, Direct connection from external supply
Wash basin	1 No. in each WC unit(inside)	*
<b>Sewage facility</b>	Twin Leech pit with inspection chamber	Sludge tank (capacity-400ltrs) with 100mm outlet facility through butterfly valve and hose pipe(For 4-seater), Sludge tank (capacity-600ltrs) with 100mm outlet facility through butterfly valve and hose pipe(For 6-seater), Sludge tank (capacity-1400ltrs) with 100mm outlet facility through butterfly valve and hose pipe(For 8-seater), Sludge tank (capacity-2000ltrs) with 100mm outlet facility through butterfly valve and hose pipe(For 10-seater), Provision for directly connected to septic tank/sewage, Twin Leech pit with inspection chamber, Sludge tank (capacity-200ltrs) with 75mm outlet facility through butterfly valve and hose pipe(For 1-seater and 2-seater),

		Sludge tank (capacity-400ltrs) with 75mm outlet facility through butterfly valve and hose pipe(For 3-seater and 4-seater)
<b>ventilation</b>	Full size ventilation above door plus half size ventilation on other side for cross ventilation	One No., Two No., Full size ventilation above door plus half size ventilation on other side for cross ventilation
Top(roof) shape	Slanting/taper	*
Projection of Roof	50mm projection on all the four sides	*
Installation and commissioning	To be done by seller	*
Plumbing and Sanitation fitting connection	To be done by seller	*
Electrical connection	To be done by seller	*
Waste extraction Fitting	To be done by seller	*
<b>Leech pit provision</b>	Yes	Yes, No
<b>Civil foundation</b>	Required to be provide by seller	No foundation Required, Required to be provide by seller, Required - to be provide by consignee himself
FRAME MATERIAL	Bottom frame material	No Bottom frame structure
	<b>Side panel frame material</b>	No side frame structure
	<b>Top(roof) frame material</b>	No roof frame structure
	<b>Top(roof) support frame structure</b>	No support structure
		35mm X 35mm X 5mm(thick) and 5mm X 25mm X 3mm(thick) MS angle (for 4-seater/ 6-seater/8-seater & 10-seater), No side frame structure
		40mm X 40mm X 5mm(thick)-35mm X 35mm X 5mm(thick) and 25mm X 25mm X 3mm(thick) MS angle, No roof frame structure
		40mm X 5mm(thick),35mm X 5mm(thick),25mm X 3mm(thick) MS flat, No support structure

<b>Partition frame material</b>	No partition frame structure	35mm X 35mm X 5mm(thick),25mm X 25mm X 3mm(thick) MS angle, No partition frame structure
<b>Ventilation frame material</b>	3 sides zero spangled cold rolled 120 GSM galvanised(galvano) powder coated louver panel for cross ventilation with EPS insulated panels(provision for natural light above door)	25mm X 25mm X 3mm(thick) flat MS, 3 sides zero spangled cold rolled 120 GSM galvanised(galvano) powder coated louver panel for cross ventilation with EPS insulated panels(provision for natural light above door), No ventilation frame material
<b>Door frame material</b>	Zero spangled cold rolled 120 GSM galvanised(galvano) powder coated with necessary stiffeners and aluminium accessories(2 Al handles - 1 Al tower bolt - 1 Al L-drop(steel sheet thickness - 0.6mm 275 MPA)	50mm X 25mm of 14-16gauge rectangular MS hollow pipe, 50mm X 25mm of 14-16gauge rectangular SS hollow pipe, Zero spangled cold rolled 120 GSM galvanised(galvano) powder coated with necessary stiffeners and aluminium accessories(2 Al handles - 1 Al tower bolt - 1 Al L-drop(steel sheet thickness - 0.6mm 275 MPA), No door frame material
<b>Support material for Door panel fixing</b>	No support material	Aluminium U-channel of 18gauge, SS U-channel of 18gauge, No support material
<b>Door hinges(two numbers)</b>	75mm size with 0.6-0.8mm thickness SS	75mm size with 1.2-1.5mm thickness MS, 75mm size with 0.6-0.8mm thickness SS, 75mm size with 1.2-1.5mm thickness Chrome plated
<b>Tank holder frame material</b>	1125mm X 820mm outer ring(tubular structure)-MS	25mm X 3mm(thick) MS flat, 25mm X 3mm(thick) SS flat, 1125mm X 820mm outer ring(tubular structure)-MS
<b>Unit understructure</b>	NO legs base	Supported by 4-legs of

			size 75mm X 37mm C-channel MS angle, Supported by 4-legs of size 75mm X 37mm C-channel SS angle, NO legs base
	<b>Stairs frame material</b>	25mm x 25mm X 3mm MS angle	25mm x 25mm X 3mm MS angle, 25mm x 25mm X 3mm SS angle, NO stairs
	<b>Stairs material</b>	No stairs material	25mm X 3mm MS flat, 25mm X 3mm SS flat, No stairs material
	<b>Door Tee material</b>	No door Tee material	40mm X 40mm x40mm X 5mm(thick) MS Tee, 40mm X 40mm x40mm X 5mm(thick) SS Tee, No door Tee material
PANEL MATERIAL	<b>Side panel material</b>	Zero spangled cold rolled 120 GSM galvanised(galvano) powder coated 40mm thick EPS panel(EPS Density-16Kg/CuM EPS thickness-38mm and steel sheet thickness 0.6mm 275MPA)	5mm thick ply core sandwich with 1mm thick FRP from both sides(5+1+1mm), Single layer 3mm thick FRP, Zero spangled cold rolled 120 GSM galvanised(galvano) powder coated 40mm thick EPS panel(EPS Density-16Kg/CuM EPS thickness-38mm and steel sheet thickness 0.6mm 275MPA), Outside paneling of 18 gauge MS sheet and inside paneling of 18 gauge aluminum sheet(single partition, corrugated sheet, Fitted with plastic light weight LLDPE roto molded
	<b>Top(Roof) panel material</b>	Zero spangled cold rolled 120 GSM galvanised(galvano) powder coated 40-70mm thick taper roof EPS panel(EPS Density-16Kg/CuM EPS thickness-38mm and steel sheet thickness 0.6mm 275MPA)	5mm thick ply core sandwich with 1mm thick FRP from both sides(5+1+1mm), Single layer 3mm thick FRP, Zero spangled cold rolled 120 GSM galvanised(galvano) powder coated 40-70mm thick taper roof EPS panel(EPS Density-16Kg/CuM EPS thickness-38mm and steel sheet thickness

			0.6mm 275MPA), 4mm poly carbonate sheet fitted on top, Fitted with plastic light weight LLDPE roto molded
	<b>Door panel material</b>	Zero spangled cold rolled 120 GSM galvanised(galvano) powder coated with necessary stiffeners and Aluminium accessories (2 Al handles-1 Al tower bolt-1Al L-drop and steel sheet thickness 0.6mm 275MPA)	5mm thick ply core sandwich with 1mm thick FRP from both sides(5+1+1mm), Single layer 3mm thick FRP, Zero spangled cold rolled 120 GSM galvanised(galvano) powder coated with necessary stiffeners and Aluminium accessories (2 Al handles-1 Al tower bolt-1Al L-drop and steel sheet thickness 0.6mm 275MPA), Outside paneling of 18 gauge aluminum sheet(corrugated sheet), Fitted with plastic light weight LLDPE roto molded
	<b>partition panel material</b>	Zero spangled cold rolled 120 GSM galvanised(galvano) powder coated 40mm thick EPS panel(EPS Density-16Kg/CuM EPS thickness-38mm and steel sheet thickness 0.6mm 275MPA)	5mm thick ply core sandwich with 1mm thick FRP from both sides(5+1+1mm), Single layer 3mm thick FRP, Zero spangled cold rolled 120 GSM galvanised(galvano) powder coated 40mm thick EPS panel(EPS Density-16Kg/CuM EPS thickness-38mm and steel sheet thickness 0.6mm 275MPA), Fitted with plastic light weight LLDPE roto molded
	<b>Floor material(inside cubical)</b>	Anti skid tile finish floor inside toilet	5mm thick FRP material, 2-3mm thick SS material, Fitted with plastic light weight LLDPE roto molded, Anti skid tile finish floor inside toilet
<b>DIMENSION</b>	<b>size of each cubical(LXWXH) ± 25mm</b>	1830mm X 1220mm X 2050mm (For physically disabled)	890mm X 840mm X 1980mm, 915mm X 915mm x 1980mm, 1220mm X 915mm X 1980mm, 915mm X

		435mm X 1955mm, 1220mm X 1220mm X 1980mm, 1830mm X 1220mm X 2050mm (For physically disabled)
Door size(WxH) ± 20mm	1790mm X 655mm(Steel sheet thickness - 0.6mm 275MPA)	*
Ventilation size(WXH) ± 10mm	838mm X 150mm(above door) plus 838mm X 75mm(opposite side)	*
<b>Partition height ± 20mm</b>	NO partition	1830mm, 1900mm, NO partition
Single pan size ± 10mm	As per buyer's choice	*
<b>Stairs size ± 10mm</b>	610mm X 230mm having 2-step	610mm X 230mm having 1-step, 610mm X 230mm having 2-step, 610mm X 230mm having 3-step, NO MS stairs
Leg height ± 20mm	NO legs	*
MISC	Door locking bolts	Size 100mm SS
	Tower bolt locking	N.A
	<b>Overhead tank material</b>	Made of PVC
	Wash basin material	made of SS 304
	WC material	made of Ceramic
	Towel rail/ring	NO towel rail
	Cloth hook	NO cloth hook
	P-trap material	made of PVC(75mm)
	Footrest(WC) material	made of Ceramic integrated with Indian WC and floor
	<b>Sewage tank material</b>	Twin Leech pit with insepction chamber
	Mirror Size	NO mirror
		Sludge tank made of FRP 4mm thick (for 4-seater/6- seater/8-seater and 10-seater), Twin Leech pit with insepction chamber, NO sewage tank

	<b>Electric provision</b>	NO electric provision	By mean solar energy, BY mean of battery, By mean of connection from main line, NO electric provision
	Water supply connection	UPVC pipe connection with all toilet interconnecting	*
	Seat cistern fitting	NO cistern	*
	Soap stand	SS 304 made	*
	Tap material	PTMT tap	*
	<b>Base floor surface(inside)</b>	To be suitably slanted towards WC for proper drainage(for Indian WC)	To be suitably slanted towards WC for proper drainage(for Indian WC), N.A
	Provision for vent pipe	N.A	*
	<b>Raised platform for passage</b>	N.A	Width of passage 1220mm and height of passage above ground level 225mm antiskid block finish on passage only, N.A
	Level indicator provision	N.A	*
CIVIL FOUNDATION DETAILS	<b>Brick foundation size</b>	200mm X 200mm with depth of 200mm from ground level for anchor/column locations	200mm X 200mm with depth of 200mm from ground level for anchor/column locations, N.A
	<b>Pocket to be filled</b>	With PCC of 1:2:4 ratio after grouting of steel element of structure	With PCC of 1:2:4 ratio after grouting of steel element of structure, N.A
	<b>Plinth height</b>	300mm with 125mm brick plus 1:5 mortar	300mm with 125mm brick plus 1:5 mortar, N.A
	<b>Platform size</b>	1125mm X 1500mm	1125mm X 1500mm, N.A
	<b>Soling height</b>	N.A	75mm by single brick flat, N.A
	<b>Floor casting</b>	75mm thick PCC of 1:2:4 ratio above brick flat soling	75mm thick PCC of 1:2:4 ratio above brick flat soling, N.A
	<b>Outside plinth plaster</b>	15mm thick on brick work with CM 1:5	15mm thick on brick work with CM 1:5, N.A
	<b>Stairs dimension</b>	Two Nos. stair of size 250mm(W) X 900mm(L) X 150mm(H)	Two Nos. stair of size 250mm(W) X 900mm(L) X 150mm(H), N.A



TWIN LEECH PIT	<b>Twin leech pit with inspection chamber</b>	1000mm Dia and 1000mm deep	1000mm Dia and 1000mm deep, N.A
	<b>Construction of leech pit</b>	made out of 40-50mm thick concrete rings/brick work with sufficient holes	made out of 40-50mm thick concrete rings/brick work with sufficient holes, N.A
	<b>Top cover</b>	75mm RCC slab(1:4:8 C:S:A)	75mm RCC slab(1:4:8 C:S:A), N.A
	Rings material	N.A	*
	<b>Dimension(inside) of one inspection chamber</b>	375mm X 375mm X 300mm(depth)	375mm X 375mm X 300mm(depth), N.A
	<b>Base of chamber</b>	75mm thick PCC in 1:5:10	75mm thick PCC in 1:5:10, N.A
	<b>Finishing of chamber(inside surface)</b>	10mm thick cement plaster in 1:4	10mm thick cement plaster in 1:4, N.A
	<b>Pipe connection</b>	To be between Toilet structure-inspection channel and leech pit	To be between Toilet structure-inspection channel and leech pit, N.A
COLOUR & FINISH	Colour of cabin	As per buyer's choice	*
	Finish	With Primer and Paint	*
WARRANTY	<b>Warranty period in number of years</b>	1	1, 2, 3
CERTIFICATION	Test reports to be furnished to buyer's on demand	YES	*
	OEM of offered product is ISO 9001:2015 certified	YES	*

\* Bold specifications are the golden parameters.

#### Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Inderjeet Kaushik	360001, Divisional Material Manager, DRM office, Kothi Compound, Rajkot.	27	30

#### EMD Detail

Required	No
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#### ePBG Detail

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Required

No

### **Splitting**

Bid splitting not applied.

### **Buyer Specific Additional Terms and Conditions**

1. **Scope of supply (Bid price to include all cost components) :** Supply Installation Testing and Commissioning of Goods
2. **Procurement under this bid is reserved for purchase from :** Local Supplier as defined in Public Procurement (Preference to Make in India), Order 2017 and its subsequent Orders / Notifications issued by concerned Nodal Ministry for specific Goods/ Products.

[This Bid is also governed by the General Terms and Conditions](#)

**---Thank You---**