

## Rail coach Factory Kapurthala

**MD 35131**

**Dated -As signed**

**Subject -Corrigendum to RCF-MD-PS-2023-2 Rev 02**

SN	Specification Number	Para	Earlier		Revised as
			S.NO	Description	
1	RCF-MD-PS-2023-2 Rev 02	Annexure-H Kitchen Arrangement	5	Water Purifier	Water purifier shall have minimum capacity of 8Ltr
			Special condition	Supply Fixing of Refrigerator on proper wooden stand of 165 Ltr capacity of suitable size to be provided	Supply Fixing of Refrigerator on proper wooden stand of 310-315 Ltr capacity of suitable size to be provided

This is for kind information And further necessary action please

**Dy.Cme/D-II**

CQM-I,II    CPLE    CWE/Fur    CMM/ HSQ    CMM/TKJ    CWE/Shell

Dy.CMM/LHB/HSQ    Dy.CMM/G    CMT    Dy. CPLE-I,II    Dy.CMM/Fur

SSE/Filing Section

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SSE Record (Original copy)

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रेल डिब्बा कारखाना  
कपुरथला  
पंजाब 144602  
स्थापित: 1986



**RCF**

KAPURTHALA

Government of India  
Ministry of Railways  
Rail Coach Factory  
Kapurthala  
Punjab 144602  
ESTT: 1986

## टर्नकी आधार पर एलएचबी ईओजी निरीक्षण कैरिज (एसी आरए) की पूर्ण साज-सज्जा की आपूर्ति और फिटमेंट के लिए खरीद विनिर्देश

### PURCHASE SPECIFICATION FOR SUPPLY & FITMENT OF COMPLETE FURNISHING OF LHB EOG INSPECTION CARRIAGES (AC RA) ON TURNKEY BASIS



Specification Number	RCF-MD-PS-2023-2		
Revision Number	02	Date of Issue	16-12-23

#### BRIEF DESCRIPTION:

This document contains the specifications required for complete furnishing of LHB EOG Inspection Carriages (AC RA) on turnkey basis to be manufactured at RCF/KXH.

## **FOREWORD**

These technical requirements laid down general / technical, testing requirements complete furnishing of LHB EOG Inspection carriage (AC RA) of Indian Railways.

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## LIST OF AMENDMENTS

S.No.	Amendment Date	Revision	Details
1	09/10/2023	1	<p>7.1 (iii) -MDTS 44387 deleted.</p> <p>7.1(viii) &amp; (ix) - Fire retardant characteristics as per EN 45545-2 and as per MDTS 43373 deleted.</p> <p>7.1 (xx) – PAPIS deleted. Item no. 2,3,4,5,6 of drawing RA64158 deleted.</p> <p>Annexure-A- For Dual FR Flocked Floor Covering (SNo.10 )- Flammability EN45545-2 HL3 deleted. Annexure-A- For Dual FR Flocked floor Covering for Master bed room, Guest room, Lounge room. (SNo.x) - Flammability 45545-2 HL2 deleted.</p> <p>Annexure A (vi)- Observation room deleted.</p> <p>Annexure-I(1)- PU foam specification MMDTS-19020 Rev05 is deleted. PU foam specification RDSO/2007/CG-04 Rev-1 is added. Fire properties complaint to R21 HL-3 of EN45545 standard is added.</p> <p>Annexure-I (4)- is deleted.</p>
2	16/12/2023	2	<p>5.1.1.5 Updated</p> <p>5.3 Clause added for conditions for quoting as a consortium or JV.</p> <p>7.1 Note regarding Roof ceiling Arrangement&amp; panel arrangement added regarding applicability of Drawing.</p>

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## 0. Introduction

This specification covers scope of work as “Supply& fitment of complete furnishing of LHB EOG Inspection Carriage (Administrative)” by the firm on Turnkey basis & eligibility criteria, general requirements & other guidelines regarding execution of work.

## 1. Objective of this document

This document contains the techno-commercial requirements for enabling a tender and contract and post contract activities for the items included in the scope.

This document is to be read along with the other tender documents i.e.

1. Notice Inviting Tender
2. RCF Bid Document
3. GCC or other standard conditions as applicable.

## 2. Scope of the specification

This document is a purchase specification for enabling purchase and installation of interior furnishing items for LHB EOG Inspection Carriage (Administrative). The document specifies the requirements for eligibility criteria, scope of supply, quality assurance requirements, prototype approval and inspection requirements, as supplied requirements, project schedule, payment milestones and guarantee warrantee.

These have been framed keeping in view the lifecycle requirements of the items to be supplied.

This document is planned to be used as part of the tender specifications for the purchase of Furnishing item kits and turnkey interior furnishing for manufacture of LHB EOG Inspection Carriage (Administrative).

## 3. List of standards and documents referred:

S. No.	Standard / Document	Title
1.	RA90030 alt-f	Layout Drgs
2.	RDSO/PE/SPEC/TL/0091-2016, Rev.1 (or latest)	Specification
3.	EDTS215, Rev-Nil, AM-3	
4.	EDTS117, Rev-A	
5.	ELPS/TP/AC/01 ,JAN-94	
(i)	EL/SPEC/EOG/001.	Code of Practice
(ii)	<b>RDSO/PE/O/0008-2005 (Rev.-0).</b>	
6.	MDTS 082	Specification
7.	MDTS-116	Specification
8.	MDTS-156	Specification

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S. No.	Standard / Document	Title
9.	MDTS-237	Specification
10.	MMDTS-19020 Rev-3	Specification
11.	MMDTS-19021 Rev-2	Specification
12.	MDTS-086	Specification
13.	MDTS-075	Specification
14.	MDTS-095	Specification
15.	MDTS25267	specification
16.	MDTS44388	Specification

Table 1: List of referred standards& documents

#### 4. Abbreviations / Terminology

S. No.	Abbreviations Terminology	Expansion / Explanation
1.	BOM	Bill of Materials
2.	KXH	Indian Railways station code for Kapurthala
3.	LHB	Linke-Hofmann-Busch the TTT partner for RCF/KXH.
4.	QAP	Quality Assurance Plan
5.	RCF	Rail Coach Factory
6.	TOT	Transfer of Technology.
7.	IR	Indian Railway

Table 2: Abbreviations / Terminology

#### 5. Pre-requisites for eligibility for bulk (regular) and development orders:

The following eligibility criteria shall be followed for evaluation of offers. These are grouped into technical and financial requirements.

*Note: The pre-requisites provided here are to be used as default requirements. These may be overruled by the eligibility requirements prescribed while processing the purchase.*

##### 5.1. Eligibility for Bulk / Regular Purchase

The following clauses list the eligibility for bulk (regular) purchase.

##### 5.1.1. Technical Eligibility

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The following shall be the technical eligibility requirements to qualify for bulk purchase.

*Note: If supporting documents for credentials as per the eligibility criteria are not enclosed, then RCF shall use its own available records or reject the bid.*

#### **5.1.1.1. Requisite Quality certification**

The Bidder shall have ISO 9001:2015 certification valid on date of bid closing. Copies of the certification shall be provided.

#### **5.1.1.2. Proven capability and capacity**

The bidder should have successfully completed turnkey furnishing of either 20% of the tendered quantity or 25 Nos. of air-conditioned railway coaches, whichever is lower, of gauge 610mm and above, and with axle load of 5 tonnes and above for any public passenger railways of the world, in a single order within period of previous three financial years and current financial years as on the date of bid closing. Turnkey means single work including panelling, seats & berths, AC ducting, roofing, flooring, toilets and electrical wiring and fittings.

Successful completion shall mean completion of work as per the contract scope including quality checks. In case of Indian Railway, completion certificate by executive department of purchasing unit and in case of entities other than Indian Railway, certificate from purchaser shall be considered for successful completion.

#### **5.1.1.3. Financial Eligibility**

Firm's total gross revenue/turnover within a period of previous three Financial Years preceding the bid closing date must be minimum 100 % of the estimated tender value.

Copies of Audited Profit and Loss account and balance sheet should be provided. Where the same is not available for the latest financial year, certificate of statutory Auditor stating that the same is not available should be enclosed. In such case, the bidder shall provide audited profit and loss account and balance sheet for 3 years preceding the year for which the audited annual report is not being provided. These financial statements must be certified by a chartered accountant or any statutory auditor.

#### **5.1.1.4. Electrical Contractor License: (This Clause shall be included wherever applicable)**

The bidder shall undertake in the bid to submit a valid class "A" Electrical contractor's License as applicable from the concerned statutory authority before start of execution of the work.

OR

The bidder shall provide an undertaking in the bid to submit a formal agreement with suitable Sub-contractor, holding a valid class A" Electrical contractor's license as applicable from the concerned statutory authority, for

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executing electrical portion of work. The bidder shall submit a formal agreement duly notarized, legally enforceable in the court of law, between the bidder and sub contractor for the Electrical component of work proposed to be executed by the sub-contractor, before start of execution of work.

### 5.1.1.5. Performance

Out of the turnkey furnishing completed by the bidders during the last 5 financial years preceding the bid closing date, at least 10 coaches or 8% of tender quantity (rounded off to next whole number), whichever is less must be in successful operation (No pending warranty complaint) for minimum 1 year after commissioning ending 30 days prior to bid closing date.

The assessment shall be made from the entries on the IR warranty Portal. certificate for successful operation will be submitted from User Railway (in case of Indian Railway, the certificate shall be submitted from Head of Quality Unit of the contracting Production Unit).

## 5.2. Eligibility for Developmental Purchase

There shall be no developmental Order.

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*Note: Documents to establish eligibility should be submitted by bidder along with the bid.*

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## 5.3. In case the bidder is a Consortium / Joint Venture

In case the Bidder is a Consortium/Joint Venture, it shall comply with the following additional requirements:

1. Number of members in a Consortium/Joint Venture shall not exceed 4 (Four).
2. A firm can be a partner in only one Consortium. Bids submitted by Consortium including the same firm as partners in more than one bid, will be rejected. (This restriction will not apply to sub-contractors for the bought-out items)
3. The Bid should contain the required information for each member of the Consortium/Joint Venture.
4. Members of the Consortium/Joint Venture shall nominate one member as the "Lead Member".
  - 4.1. Lead Member shall meet 51% of the financial eligibility condition in case of Consortium or shall have minimum 51% shareholding in the Joint Venture.
  - 4.2. The nomination of Lead Member shall be supported by a Power of Attorney, as per the format at Annexure 1&2, signed by all the other members of the Consortium/Joint Venture.
  - 4.3. The lead partner shall be responsible for coordinating the scope of supply / work as detailed in this document. There should be an authorization to this effect evidenced by submission of a power of attorney with bid duly signed by legally authorized signatories of all partners.
  - 4.4. The lead partner shall be authorized to incur liabilities and receive instructions for and on behalf of any and all partners of the Consortium, and the entire execution of the contract, including payment, shall be done exclusively by the lead partner.
  - 4.5. The lead member of Consortium shall be responsible for all financial covenants and bank guarantees.
5. Technical Eligibility requirements is to be satisfied by any member of Consortium/Joint Venture having minimum 26% share of financial eligibility in case consortium or 26% shareholding in the Joint Venture.
6. Consortium/Joint Venture as whole shall cumulatively/collectively fulfil the 100% Technical Capability as per and 100% Financial Capability.
7. The Bid shall include a brief description of the roles and responsibilities of individual members, particularly with reference to financial, technical and defect liability obligations;
8. The Lead Member shall carry out works directly under its own supervision and through its own personal.

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9. Members of the Consortium/Joint Venture shall have entered into a binding Joint Bidding Agreement, substantially in the form specified at Annexure 3, for the purpose of making the Bid.
10. A copy of the agreement entered into by the Consortium partners shall be submitted with the bid. Alternatively, a “letter of Intent” (to execute a Consortium agreement, meeting with all specified requirements, in the event of a successful bid) shall be signed by all Consortium partners and submitted with the bid together with a copy of the proposed agreement. Consortium agreement duly signed by all Consortium partners shall form part of the contract agreement. The Consortium agreement should precisely indicate the responsibility of all members of Consortium in respect of planning, design, manufacturing, supply, installation, system integration, commissioning, training and warranty obligations etc. This should not be varied/ modified subsequently without the prior approval of the purchaser. The Consortium agreement should be Registered/Notarized anywhere in India, if the lead partner/Consortium partners are registered in India. For foreign companies, they should be Registered/Notarized as per the laws of their respective country, so as to be legally valid and binding on all partners. (Annexure-3)
11. All partners of the Consortium shall be liable jointly and severally for the execution of the contract in accordance with the contract terms.
12. Approval for change of constitution of Consortium/Joint Venture shall be at sole discretion of the Authority. The constitution of the Consortium/Joint Venture shall not be allowed to be modified after submission of the Bid by the Consortium/Joint Venture, except when modification becomes inevitable due to Succession laws etc., provided further that there is no change in qualification of minimum eligibility criteria by Consortium/JV. However, the Lead member shall continue to be the Lead Member of the Consortium/Joint Venture. Failure to observe this requirement would render the offer invalid.
13. Similarly, after the contract is awarded, the constitution of Consortium/Joint Venture shall not be allowed to be altered during the currency of contract except when modification becomes inevitable due to Succession laws etc., provided further that it does not change the minimum eligibility criteria. Failure to observe this stipulation shall be deemed to be breach of contract with all consequential penal action as per contract condition.

## 6. Salient features of the coach:

1. World class passenger amenities items like carpets, sofas, snack tables, mirror, toilet fittings, taps etc.
2. Hygienic bathrooms with tiled walls
3. Aesthetically pleasant interior paneling and moulding.
4. Provision of LED type Luminaries with better aesthetics.
5. Provision of Bracket type Fans with better aesthetics.
6. Provision of Modular Type Switches/Socket with better aesthetics.
7. Provision of two nos. RMPU (suitable for flat roof mounting) for AC area similar to LHB coaches.
8. Provision of Modular pantry equipment.

## 7. Scope of work:

The scope of supply shall include manufacture, assembly and supply of furnishing kits. Quantity and supply conditions for scope of supply:

### 7.1. Mechanical Items:

#	Description of items	Qty/ Coach	Scope as per Drawing	Additional requirements
(i)	Layout drawing no.	—	RA90030 alt f	

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#	Description of items	Qty/ Coach	Scope as per Drawing	Additional requirements
(ii)	General Installation No.	—	RA90032	
(iii)	Coach floor Complete	1 set	RA41144	Annexure-A  The firm shall submit the prototype for approval before regular supply.
(iv)	Layout of Partition frame	1 set	RA10007	The back pieces required for the fitment shall be in scope of the firm.  The firm shall submit the prototype for approval before regular supply.
(v)	Sanitary Facilities complete	1set	Item 2 (RA63008) of RA63245	Annexure-J
(vi)	Seating arrangement	1 set	RA61001	Annexure-B,C,D,E,F,G and Annexure I
(vii)	Location of Doors	1 set	RA56003	Item no.1 of RA56003 (Body side entrance doors) are in RCF scope.  Provision of normal body side door or plug doors to be decided by planning already advised this office letter no MD46231 dated 12/06/23.
(viii)	Roof Ceiling arrangement (Note: The firm shall submit the prototype for approval before regular supply.)  <i>Note: Two mutually exclusive options are listed depending on the type of body. The indenter</i>	1 set	RA44404-'b'	For swing type body side door.
		1 set	RA44404-'a'	For plug type body side door

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#	Description of items	Qty/ Coach	Scope as per Drawing	Additional requirements
	<i>must specify the type / quantity of the item to be supplied</i>			
(ix)	Paneling and Molding of side wall. (ITEM 3, Door frame paneling of RA42132)  Note: The firm shall submit the prototype for approval before regular supply.	1 set	RA42173-NIL	For swing type body side door.
		1 set	RA42149-NIL	For plug type body side door
	<i>Note: Two mutually exclusive options are listed depending on the type of body. The indenter must specify the type / quantity of the item to be supplied</i>			
(x)	Location of Flat Ceiling arrangement	1 set	RA44403	The firm shall submit the prototype for approval before regular supply.
(xi)	AC system arrangement	1 set	RA44405	
(xii)	Layout of Window	1 set	RA54002	
(xiii)	Roller Blind arrangement	1 set	RA64003	
(xiv)	Marking Diagram	1 set	RA83115	
(xv)	Fixing arrangement of fire extinguisher	2 Nos.	RA64138	Location for the Fire Extinguisher shall be as per Layout
(xvi)	Grips and Labels mounting arrangement	1 set	RA26105	
(xvii)	Foot Step Complete Mounting	6 Nos.	CC24116	
(xviii)	Kitchen Arrangement	1 set		Annexure-H
(xix)	Fire detection system (VESDA)	1 set	RA64158	Item No. 8 of the drawing RA64158 is in the scope.
(xx)	Electronics Equipment Rack and Metallic Paneling	1 Set	RA64158	Item no. 1,7 of drawing no. RA64158 is in the scope. Additionally Metallic Paneling to be provided for space for IT and space for VESDA rack area.

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#	Description of items	Qty/ Coach	Scope as per Drawing	Additional requirements
(xxi)	Furnishing Plate	1 set	CC64116	
(xxii)	Dustbin below Fire Extinguisher	2 Nos.		Semicircular Metallic Dustbin to be provided in Observation room.

Table 3: Mechanical Items

**NOTE**

*Latest alterations of the drawings to be followed. Color Schemes shall be provided by supplier for approval from CDE/RCF.*

## 7.2. Electrical Items

**7.2.1.** The following types of Light fittings shall be provided in the Coach. However, exact design, type, model and layout to be described in the offer:

S.N.	Description of items	Qty/ Coach	Scope	Reference RCF drawing
<b>(A) Light Fittings</b>				
1	LED Light Fitting Type-A (18W) (110VAC/DC)with polycarbonate front Cover arrgt.  (for Observation Room 1&2 (02 each), Kitchen (01), Attendant Room (01),Steno Room (01), Lounge Room,(04) ,Master Bed Room (02),Guest Room (02)	15 nos.	RCF/ICF/ MCF Appvd. Sources.	CC76466
2	LED light fitting for Mirror/lavatory area (9W)(110VAC/DC)(with inbuilt switch.) (for Master/Guest/Steno/Attendant RoomLavatories area (01 each)	04nos.		CC76471
3	Emergency light unit as per RDSO Spec No. RDSO/PE/SPEC/AC/0180-2016 (Latest Rev.),	01 set (one set comprises of 04 lights)		Type-2
4	LED Light Fitting for Passenger Alarm Chain Indication Type-I (5W)(110VAC/DC)	02 no.		LW76098
5	LED Light Fitting RoundType (9W) (White) (110VAC/DC)	03 no.		CC76475



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	(Master Bedroom (02), Guest Bedroom (01))			
6	LED Light Fitting Round Type with NL (9W+1W) (White) (110VAC/DC)  (Attendant Room(01), Steno Room (01) Lounge Room (02), Master Bedroom (02), Guest Bedroom (01))	07 nos.		CC76468
7	LED type Bed Reading light, (02W) (110VAC/DC) (for Master bed Room(02) & Guest Room (02).	04 nos.		CC76469
8	LED type wall mounted type Decorative Light, (9W) (110VAC/DC)  (Lounge Room (04) & Master Bedroom Area (02).	06 nos.	RCF/ICF/ MCF Appvd. Sources.	CC76472
9	LED type Focusing Light (9W) (110VAC/DC)  (Lounge Room (04), Master Bedroom (01) Guest Room (01), Corridor (02))	08 nos.		CC76470
10	LED type Spot Light (5W) (110VAC/DC)  (for Observation Room 1 & 2 (3x2=06nos.) 4 nos.Lavatories area (02 each) (4x2=08nos.)	14 nos.		CC76467
11	LED Down type Light with NL with Polycarbonate front cover arrgt. (9W+1W) (110VAC/DC)  (Observation Room Area 1& 2=1no each) (Kitchen-2nos.), (Corridor area-09nos)	13 nos.		LW76414
12	Combined LED Focus light and Tail light with Flasher Unit System to drawing no. CC76474(110VAC/DC)(End wall –PP & NPP side)	02 Set		EDML 204
13	LED Foot step light type (9W) (110VAC/DC)  (Coach Doors)	06 nos.		CC76473

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Table 4: Electrical Items

14	LED type Indirect light (9W) (Warm White) (110VAC/DC) in center ceiling panel (length as per requirement)  (Lounge Room (01set )& Master Bedroom Area(01 Set)	02 Set		LW76411
(B) FANS				
i.	Wall Bracket type, 300mm Sweep,230VAC High Speed Fan.  (Lounge Room (01), Master Bedroom (01), Observation Room Area (02 each) & Master/Guest/Steno /Attendant Room lavatories area) (01 each)	10 nos.	--	Crompton Model No. <b>Torpedo</b> or equivalent USHA/Havells/Bajaj make
ii.	Exhaust fan (with metallic blades) (Master/Guest/Steno Room lavatories area (01no. each))	03 nos.	RCF/ ICF/ MCF Appvd. Sources	ICF Drg. No.: ICF/SK-7-6-177 Alt. <b>b</b>
(C).	Set of Modular type Switch Plate Assemblies for LHB RAAC Coach	01 Set		EDML205 (Ref. Note-C)
(D).	Call bell cum Annunciator	01 Set		EDTS 117, Rev-A (Ref. Note-D)
(E).	Microcontroller based Electronics Speed Indicating System( <b>Master &amp; Slave Unit</b> ).	01no.		MP-0-3700-07 Rev-7 - Aug 2017with RCF Annexure-B. (Ref. Note-E).
(F)	Set of Terminal Strip for RAAC Coaches.	01no.	--	EDML 203
(G)	Wiper Motors	02nos.	-	<b>C26727190</b> of M/s Lucas TVS or any other appvd. make.
		02nos.	-	<b>C26727220</b> of M/s Lucas or any other appvd. make. (Ref. Note-F).
(H)	Rotary Switch (for Wiper Motor & Focus light unit on Observations Room end wall both sides).	4nos.	-	M/s EAO make  ( toCat no. 704.093.18 – Selector switch actuator 3 positions long lever) or any other appvd. make. (Ref. Note-G).
(I)	MCB distribution Box for pantry equipments.	01no.	-	EDML 206 (Ref. Note-H).

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NOTES:-

**A). Light Fitting:**

The above light fittings shall be procured from RCF/ICF/MCF approved sources only by the contractor and provided on FRP PANELs inside the coach keeping the fixing/interface requirements as per existing design. The LED light fitting shall comply with the RDSO spec. No. RDSO/PE/SPEC/TL/0091-2016 (with latest Rev.). However, Prototype design approval for general layout arrangement of light fittings shall be taken from CEDE/RCF.

Stainless Steel Hardware of suitable size shall be used for installation of Light fittings inside the coach & will be in firm's scope of supply.

**B). FANS:**

**(i). Wall mounted Bracket fan (300mm Sweep)**

**230VAC,300MM Sweep** Wall Bracket Mounted type(**High speed**) shall be provided in Lounge Room/Master Bedroom/Guest Bedroom/Observation Room/Kitchen/Lavatory area as mentioned above. The fans shall be of **Crompton Model No. Torpedo** or equivalent Usha/Havells/ Bajaj make and shall be procured by the contractor and provided in coaches.

The Fans shall be provided with Male & Female 'WAGO' type connectors to part no. **721-603/721-103** or equivalent for interconnections inside the coach.

Stainless Steel Hardware of suitable size shall be used for installation of fans inside the coach & will be in firms' scope of supply

The prototype sample of the subject fans shall be submitted and got approved from CEDE/RCF before supply.

**(ii). Exhaust Fan Assly: - (Reference Document No.: ICF/SK-7-6-177, Alt-b)**

1no. exhaust fan for Lavatory suitable for 110VAC shall be generally conforming to Drg. No. **ICF/SK-7-6-177, Alt b(with metallic blades)** shall be suitably integrated in each Lavatory module to exhaust the foul air from the lavatories. However suitable aluminum ducting arrangement similar to LHB Coaches shall be provided from Attendant Room Lavatory to Steno room Lavatory for exhaust of foul air from Attendant room lavatory area.

The fans shall be procured from RCF/ICF/MCF approved sources only by the contractor and provided in coaches keeping the fixing/interface requirements as per existing design.

Stainless Steel Hardware of suitable size shall be used for installation of fans inside the coach & will be in firms' scope of supply

**C). Switch Plate Assembly:-**

Reference Document No. -EDML 205, Rev. 0(IS: 3854& IS: 1293 (Latest)

The general construction of the complete Modular type switch plate assembly in different areas of the coach shall generally be as per **EDML 205 Rev. 0.**

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The above switch plate assemblies shall be procured from RCF/ICF/MCF proven sources only by the contractor and provided in coaches keeping the fixing/interface requirements as per existing design. The Switches/Sockets will be developed/designed blending with the interiors of the coach. Stainless Steel Hardware of suitable size shall be used for installation of Switch plate assemblies inside the coach & will be in firms scope of supply.

**C-1 Laptop/Mobile Charging point:-**

**Laptop/Mobile Charging points (i.e. 3-Pin Sockets, 6A, and 110V) shall be provided at the various locations in coach as per under given details:**

S.N.	Area	No. of Points
1.	Master Bedroom,	02 01 (Lav. Shaver Socket)
2.	Guest Room	02 01 (Lav. Shaver Socket)
3.	Lounge Room	03
4.	Observation Room	02
5.	Steno Room/Attendant Room area	03 (Attendant Room) 02 (Steno Room)
6.	Master/Guest/Steno & Attendant room Lav. area.	04

**C-2 3-Pin Socket 6A, 220V AC shall be provided as per under given details:**

S.No.	Area	No. of Points
1.	Master Bedroom,	02
2.	Guest Room	02
3.	Lounge Room	02
4.	Observation Room	04
5.	Steno Room area	04
6.	IT Room area	04

**C-3 05-Pin Socket 16A, 220V shall be provided as per under given details:**

S.N.	Area	No. of Points
1.	Kitchen Room(Hot Plate-02, Chimney-01, Microwave-01, Water Heater-01, Water Purifier-01 & Refrigerator-01)	07
2.	Master Bed Room Lavatory area (Geyser-01)	01
3.	Guest Bed Room Lavatory area (Geyser-01)	01
4.	Steno Room Lavatory Area (Geyser-01)	01

**(D).** The Call bell cum Annunciator system to specEDTS117, Rev-A shall be in Firms Scope of Supply including Installation, Testing and Commissioning of the complete system in the coach.

**(E).** Microcontroller based Electronics Speed Indicating System (Ref. spec. no. MP-0-3700-07 Rev-7 - Aug 2017) **with RCF Annexure-B (Master & Slave Unit):** The Micro controller based electronics Speed indicating system shall be in RCF scope of Supply; **however Installation, Testing and Commissioning of the complete system will be in firm's scope.**

**(F).** **Wiper Motors:** 02 nos. wiper motors each on Observations Room Window as per Part no.s mentioned at Cl. 7.2.1 (G) above shall be provided. The directions of rotation of the wiper arms shall be the same.

Stainless Steel Hardwares of suitable size shall be used for installation of wiper motor assly. inside the coach & will be in firms scope of supply.

**(G).** Rotary Switch (for Wiper Motor & Focus light unit on Observations Room end wall both sides) as per Part no.s mentioned at Cl. 7.2.1 (H) shall be suitably fixed on the Stainless steel plate on the corner of

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each end wall with provision of SS hardwires. Complete Wiring for rotary switch and the associated equipment shall be in firm's scope.

- (H). MCB distribution Box for pantry equipments shall be suitably fixed on the partition wall with SS hardwares.

*Special Note:-* Installation/Commissioning of Electrical Items which are in firm's scope shall also include hardware (SS)/Crimping Lugs /WAGO Connectors / or any other additional material etc. as per site requirement.

### 7.3. As-built Design & Documentation

The contractor shall submit the following design documents and artifacts:

1. Bill of materials.
2. Sources of supply with procurement Invoices approximate cost (more than one alternative indigenously sources)
3. Operations Instructions & Installation manuals (3copies)
4. Maintenance manuals (3copies)
5. Complete catalogue for items, fittings instruction including trouble shooting for easy maintenance by the Railways
6. Any other documentation, as identified and required, by RCF during the process of design development.

**Note: All design and drawings of successful bidder as approved by RCF shall be the property of the RCF. RCF shall have the proprietary rights of these designs.**

### 7.4. Technical requirements

#### 7.4.1. Tolerances of coach shell dimensions

Minor variations are likely in dimensions of the coach shell, due to fabrication tolerances. The same shall be taken into consideration.

#### 7.4.2. Management of expected shock and vibration for improved NVH

During installation, it shall be ensured to control vibrations of items so that reliability/life is not affected and no damages take place.

#### 7.4.3. Aesthetically pleasing and safe, anti-pilferage

All interior fittings should have aesthetic look and flush with the interior decor. Sharp edges shall be avoided. All the interior fittings should have anti-pilferage feature.

#### 7.4.4. Availability of Raw Materials

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Raw material such as special upholstery for seats, special paint with specified shades should readily available with the firm for repair and maintenance.

#### **7.4.5. Electrical code of Practice:**

The connections of all Electrical Items under the scope of Supply/Installation shall be done by the contractor in accordance with the Code of practice for wiring EL/SPEC/EOG/001(latest) and Code of practice for fire prevention in AC Coaches: RDSO/PE/O/0008-2005 (Rev.-0).

The contractor shall handover the coach in fully ready condition for functional testing and QC clearance by Quality department after conducting the continuity test, IR testing on complete coach wiring and verification of various circuits at 110V DC & 110V AC level. Final Electrical clearance shall be accorded by Dy CEE/EP/RCF.

#### **7.5. Accessories and hardware**

The scope of supply installation testing commissioning includes all accessories including necessary hardware and consumables etc.

### **8. Project activity sequence**

The following sequence shall be followed for the execution of the project.

#### **8.1. Tender processing**

Bidders shall participate in the tender on IREPS, and the tender shall be awarded as per the extant process.

#### **8.2. Design & process and approval**

The contractor shall submit samples along with technical details and WTC, OEM details for following furnishing materials /fitting for finish/ color/shade/pattern/functionality:

- Wall Tiles
- Floor Tiles
- Carpet /Flocked Flooring
- PVC
- Laminate sheets
- DI-NOC Film
- Bath room fittings
- Tables
- Chairs
- Dressing Table
- Corners Table
- Sofa's
- Handles
- Study Tablesetc

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### **8.3. Development of Quality assurance Plan (QAP) and approval**

The contractor's team in collaboration with RCF Team shall develop a QAP documenting the Hold and Witness points (stages, pre-dispatch, post-receipt and final inspections) for the project.

The final QAP shall be approved by RCF Design.

### **8.4. Dispatch of prototype furnishing kits to RCF/KXH**

Contractor shall manufacture the furnishing kits as per the approved designs and in conformance to the approved QAP and dispatch the same to RCF as per the advised schedule by Dy.CME/Design-II/RCF.

### **8.5. Assembly of furnishing kits at RCF/KXH**

Work on the supplied furnishing kits, at RCF, shall be done as follows.

Note: The all furnishing kits assembly at RCF shall be done by contractor's manpower. RCF team shall supervise the activity. Modifications required to be done on the supplied items for enabling assembly shall also be done by the contractor's manpower.

#### **8.5.1. Installation of the furnishing kits on the prototype coach shells at RCF**

The furnishing Contractor's team shall install the furnishing kits in the coach shells at RCF. There shall be 2 Nos. of Prototype Coaches and need to be furnished one after another.

### **8.6. Proto type Review**

RCF and Contractor's teams shall jointly conduct detailed review. Observations shall be made during this exercise for improving the tolerances and quality of the final coach.

### **8.7. Review of modifications required in furnishing kits**

The detailed observations and required modification information collected in the preceding activities shall be compiled and designs shall be updated in a collaborative process by the Contractor's and RCF teams.

### **8.8. Supply of change validation kits to RCF and fitment**

The design changes planned in the preceding activities shall be implemented and the supply of remaining furnishing kits shall be made as per the updated designs.

The furnishing kits shall be supplied to RCF for assembly into shells as detailed earlier. Detailed observations shall be made for validating all design changes.

### **8.9. Go-ahead for series production of Coaches.**

A go-ahead shall be given to the contractor for supply of remaining furnishing kits and its installation on the successful completion of the previous activities.

### **8.10. Series manufacture and supply of furnishing kits and its installation**

Once the go-ahead for series production is granted, the contractor shall start series production and supply the furnishing kits and its installation as per the advised schedule.

The contractor's team at RCF shall install these kits into the coach shells as per the schedule advised by Dy.CME/Fur-I/RCF.

## **9. Project Schedule**

The planned project schedule is expected as detailed in the following table.

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S.N.	Activity	Agency Responsible	Expected Duration (Days)	Expected Milestone Completion (Days)
1	Tender Finalization and placement of LOA.	RCF/KXH	0	D+0
2	Manufacture and supply of prototype furnishing kits(one for each type of coach).	CONTRACTOR	60	D+60
3	Installation of furnishing kits in prototype coaches	BOTH	15	D+75
4	Validation check and go ahead for series production	BOTH	5	D+80
5	Review and sign-off of final detailed design Documents "as-built"	BOTH	15	D+95

Table 5: Project Schedule

Delivery period will be 10 months after placement of Purchase order.

## 10. Quality Assurance and Inspection Plan

### 10.1. Quality Assurance, Tests & Documents

A QAP framework document that been provided as an annexure to this document. The contractor shall use the same and prep area QAP to ensure requisite quality throughout the progress of the project.

The following table provides the overview of the system for quality assurance:-

Requirement Description	Requirement Detail	Remarks
Quality Assurance Plan	<p>The manufacturer shall have detailed quality assurance plan. The plan shall be submitted for approval by the indenter/purchaser.</p> <p>The QAP document shall clearly document the following and control the test record formats.</p> <ol style="list-style-type: none"> <li>Control over out sourced products and processes</li> <li>Testing of raw material and establishing it traceability.</li> <li>Sampling Plan</li> <li>Type Tests</li> <li>Routine Tests</li> <li>Acceptance Tests</li> <li>Witness &amp; Hold Points</li> </ol>	The QAP shall be submitted in PDF softcopy, digitally signed by the Head of Quality Department of the manufacturer.



Type Tests	These tests shall be conducted as per the QAP and are normally required in case of change of design.	There cords of the type tests shall be maintained by the manufacturer and shall be made available upon demand. These records shall be traceable and verifiable.
Routine Tests	The manufacturer shall conduct routine tests as per the approved QAP.  The records of tests conducted shall be verifiable upon request.	The records of the type tests shall be maintained by the manufacturer and shall be made available upon demand.  These records shall be traceable and verifiable.
Acceptance Tests	The acceptance test shall be conducted on batches offered for delivery.  The tests shall be conducted as per the details mentioned elsewhere in the document.	These shall be conducted by the consignee or their authorized agency prior to dispatch.  All infrastructures required to enable acceptance tests shall be provided by the bidder /OEM.

Table 6: Quality Assurance Tests & Documents

## 10.2. Inspection Plan

The inspection plan shall be proposed by the contractor based on the QAP framework provided as an annexure to this document. This plan shall be proposed as a set of the following events:

1. **Hold Points:** means an identified point in a process beyond which the Contractor must not proceed without written authorization or the release of a designated authority of RCF or 3<sup>rd</sup> party agency duly authorized by RCF.
2. **Witness Points:** means an identified point in a process where the Contractor must give prior notice to RCF to allow a designated authority of RCF or 3<sup>rd</sup> party agency duly authorized by RCF, to attend and witness the point in the work process should it choose to do so.

The inspection plan shall be reviewed and agreed jointly by RCF and the contractor.

## 11. Provisioning of facilities for working

The following shall be the distribution of provisioning of facilities for working during the course of the project.

### 11.1. Facilities to be provisioned by RCF at RCF/KXH

RCF shall provide the following provisions for enabling the contractor working at RCF premises only.

1. RCF shall provide limited space inside covered shed (not enclosed) to the contractor for keeping the material/consumables& tools required for day today work.
2. RCF will provide suitable cranes with drivers, as available at RCF/KXH, for loading unloading of furnishing items i.e. FRP modular lavatory.
3. RCF will provide bare coach shells fitted atop dip-lorries at the designated places for working. The necessary assistance for movement of shells to the designated places shall be done by

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4. Power supply, Compressed Air and water etc. for working at site shall be provided by RCF/KXH.
5. Access to toilets and drinking water facilities shall be provided at RCF/KXH.

## 11.2. Facilities to be provisioned by the contractor

1. Contractor shall deploy a site office structure in ISO container(s) to function as site office and site tools and material storage. The site office shall be setup by the contractor and removed and taken away by the contractor at the end of the contract.
  - a. The site office shall be self-contained, however electrical supply shall be provided by RCF at RCF/KXH.
  - b. The maximum footprint of the site office and store shall be limited to 2x40' containers. Double stacking can be permitted where required.
  - c. Special cranes & lifting tackles for deployment and removal of the containers shall be provided where needed.
2. Material handling equipment and fork lifters with drivers.
3. All workbenches, hand tools, IMTE's with their respective spares and consumables.
4. Ladders / Maintenance Access Platforms / Man lifts Hand trolleys / powered trolleys for transporting tools and IMTE's.
5. Any other tools & plants required for progress of work (and not explicitly listed in facilities provided by RCF/KXH shall be the contractor's responsibility.

Battery/Hydraulic operated Automatic Crimping Tools shall be used by the firm for crimping.

## 11.3. Safety and performance of tools and equipment of the contractor

All the tools and equipment e.g. drills, lighting arrangement inside the coach, work benches, ladder & working platform etc. as required to execute work as per scope of work shall be arranged by the contractor. The contractor shall use safe tools. Proper extension boards shall be used. Extension wires with joints and without insulation shall not be used. All the electrical power tools shall be equipped with proper electrical plugs.

Note: The contractor shall be responsible for keeping all assigned areas clean and injury free during the progress of the contract.

## 12. General Terms & Conditions

The following terms and conditions shall be applicable for the project. These are considered in addition to statutory, regulatory requirements and IRS standard conditions.

### 12.1. Sub-contracting and outsourcing

The contractor may sub-contract or outsource as per requirement. The following must be complied under these conditions:

1. Prior approval shall be taken from RCF/KXH.

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2. The confidentiality of shared information is ensured.
3. The contractor shall remain responsible for meet all conditions and requirements of this contract, even in case of outsourced items and services. (The responsibility does not shift to the sub-contractor).

## **12.2. Follow RCF production plan**

All shells to be furnished as per production plan of RCF; Supply schedule of each variant will be in staggered manner and will be manufactured and supplied as per schedule of supply advised by Dy.CME/Fur/RCF from time to time.

Planned project schedule is mentioned at Para 9.0. After clearance of first Prototype Coach from quality deptt. or as communicated by Dy.CME/Fur/RCF, supplier will supply furnishing material within one month. Supplier will furnish @4-5 coaches per month. Cycle time of furnishing & finishing of coach including quality clearance will be maximum 25 days from allotment of shell for furnishing by Dy.CME/Fur/RCF. Any delay on RCF account during this cycle will be added in the cycle time of 25 days. Shop and supplier, both will jointly maintain records of handing over of shell.

## **12.3. Safe keep during storage and transit**

The contractor shall be responsible for safe transporting and loading/un-loading of supplied products. Adequate measures shall be taken to avoid damage to surface body shell surface during transport/storage.

## **12.4. RCF right to inspect and audit**

RCF shall have the right to take item/assembly supplied by the firm into Audit for checking of parameters as per laid down procedure.

## **12.5. Handling of changes post approvals**

Any changes from approved models, detailed part drawings, BoM, material specifications shall be done via a design approval process and be released for implementation with the approval of CDE/CEDE/RCF.

Any modification arising out of design review process shall be incorporated by the firm in bulk supply without any financial implication.

## **12.6. Sourcing of raw material and assemblies**

Items to be procured from RDSO/RCF/ICF/MCF as per applicable drawings and specifications. Any exception to be reported and approval taken.

## **12.7. Change in quantity distribution**

The quantity distribution between successful bidders can be changed based on the performance in due course of the turnkey project. The firm lagging in completion of work or with poor quality shall be penalized with reduced quantity as decided by the competent authority.

## **12.8. Damage to RCF property**

In case of any damage to RCF property, Coach Item or Shell during commissioning, the same shall be repaired/replaced by the Firm. In case any alternation in shell is required, prior approval of competent authority is required.

## **12.9. Damaged to supplied/fitted materials**

Any item supplied by firm damaged during commissioning or before the issue of Completion Certificate; the same is to be replaced by the firm as free of cost.

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## 12.10. Requirement of Contractor's Personnel

### 12.10.1. Site Manager

Contractor shall deploy at least 1 dedicated site manager in charge of all activities at the work sites including workers safety and management of materials.

### 12.10.2. Identification

All contractors' workers shall be duly identified and shall always carry a contractor provided ID card on their person during their presence on the shop floor at RCF/KXH.

### 12.10.3. Qualifications of personnel

The contractor shall ensure that all personnel deputed are duly qualified and have adequate experience to handle the delegated jobs.

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*Note: The contractor shall provide the detailed CV of all personnel of their team deputed to work at RCF/KXH.*

*The contractor shall ensure that the technicians having experienced on working on first prototype coaches are not changed/replaced till the execution of whole contract.*

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### 12.10.4. Adequate man power

All coaches to be furnished as per production plan of RCF. Contractor shall depute adequate manpower to ensure the production targets.

### 12.10.5. Working dress and PPE

All contractors' workers shall be suitably attired and shall be wearing the requisite PPE's for the job.

The following minima PPE's shall be worn by all contractor personnel at all times during their presence on shop floors of RCF/KXH

1. Hardhat with contractor's logo/name
2. High visibility vest with contractor's logo/name
3. Industrial safety shoes

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*Note1: Jeans and T-shirts with the contractor's logo / name may be considered as shop floor uniform for the contractor's team.*

*Note2: The contractor shall be solely responsible for the orderly and proper conduct of his staff during the period of work inside the RCF/KXH. The staff shall be polite and courteous.*

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### 12.10.6. Fines

1. If any safety instruction is not adhered to and if any of the contract worker is found without PPE, penalty for the same shall be applied @₹500/person-day.

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2. Chewing of Pan/Gutka/any intoxicant is strictly prohibited at workplace, violations shall attract a penalty @₹500/person-day.

## 12.11. COVID-19 Safety

COVID-19 guidelines issued by Government of India /RCF /Punjab /State Govts are to be followed.

## 12.12. Compliance of Statutory &Regulatory requirements

All compliances with respect to statutory and regulatory requirements for the activities handled by the contractor shall be sourced by them.

### 12.12.1. Indemnification of RCF

The contractor shall provide a written undertaking to indemnify RCF from action resulting from breach of compliance of statutory and regulatory requirements for activities handled by them.

## 12.13. Miscellaneous Terms and Conditions

### 12.13.1. Quality Management

The Contractor shall maintain prescribed quality of work and good workmanship.

If any quality deviation is identified, necessary corrective and preventive actions shall be taken by the Contractor at the first instance of identification. If the Contractor fails to maintain the required quality standards and gets repeated rejection/rework, the contract will be terminated. Further action may be taken to duly disqualify the firm from quoting for future tenders.

### 12.13.2. Communication & Coordination

The contractor shall ensure proper communication and coordination with nominated personnel of RCF/KXH for progress connected to the project.

### 12.13.3. Stage inspection Hold & Witness Points

Stage Inspections, as required work shall be carried out by authorized personnel of RCF/KXH. The schedule of such inspections shall be prepared jointly by the RCF and contractor in the form of “Hold & Witness Points”

The contractor shall offer for inspection in writing after completion of work duly indicating the date of work and Shell number. Any inspection points raised on the installation work done till the dispatch of the coach, shall be cleared by the Contractor before turning out of coach.

### 12.13.4. Record of activities, instructions and compliances

The contractor shall maintain proper record of all activities, instructions and compliances in a register which will be checked periodically by concerned nominated personnel of RCF/KXH.

## 12.14. Errors omissions & discrepancies

The bidder(s)/contractor shall not take advantage of any misinterpretation of the conditions due to typing or any other error and if any doubt shall bring it to the notice of CDE/CEDE/RCF without delay in case of any contradiction.

Only the printed rules and books should be followed and no claim for the misinterpretation shall be entertained.

## 13. Guarantee/Warranty and Spares

The expected life of the coach furnishing is more than 6 years. The supplier shall provide a warranty for all supplied items for a period of 3 (three) years from date of fitment or 3.5 (3 years 6 months) years from the date

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of supply whichever is earlier. However if item mentioned in the scope having larger warranty period in respective item specification then the larger warranty period of that item shall be applicable. However the expected life for LED type Luminaries shall be for 60 months from date of commissioning or 72 months from date of supply which is earlier as per Cl .11.0 of RDSO Specification RDSO/PE/SPEC/TL/ 0091 Rev.-1(latest)

### **13.1. Attention on site**

Warranty claims will be applicable as per IRS terms and conditions. The warranty complaints/issues to be attended at respective depot.

### **13.2. Preventive Maintenance during warranty**

Preventive maintenance of all the items in the scope of turnkey is to be carried out by the contractor for a period specified at the primary maintenance depot from the date of dispatch of coach from RCF.

## **14. Payment Milestones and Terms**

1. The first tranche of payment shall be released upon completion of 2<sup>nd</sup> coach and 2 coaches successfully clearing prototyping & quality checks. Initially 70% of total billed amount shall be payable. The remaining 20% shall be released upon successful completion of the furnishing and finishing of the coaches.
2. Thereafter payments shall be released in tranches of minimum 2 coaches.
  - 70% of amount shall be released upon delivery and acceptance at RCF/KXH
  - 20% amount shall be released upon successful completion of the furnishing and finishing of the coaches.
  - The remaining 10% shall be retained as the performance guarantee for the duration of the warranty period. The firm may submit an irrevocable bank guarantee, or any other suitable / acceptable instrument mandated by the purchase officer, to release the 10% amount withheld.

Note: Performance guarantee shall be released on NOC provided by the primary maintenance depot of the coaches.

## **15. Penalties**

### **15.1. Penalty for non-completion of the coach work**

Penalty of Rs. 5000 per day per coach shall be levied upon the contractor if he/she is not able to fit/install the material supplied and clear the coach from the Quality department as per the agreed scope and schedule.

### **15.2. Attention during warranty**

A trouble-free operation of contractor supplied items is expected.

Warranty claims will be applicable as per IRS terms and conditions. Warranty complaints/ issues to be attended at the respective depot.

Preventive maintenance of all the items in the scope of the turnkey is to be carried out by the contractor for a period specified in IRS conditions at the primary maintenance depot from the date of dispatch of coach from RCF.

## **16. Information to be provided by bidder/contractor**

The following information shall be provided by the bidder/supplier.

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### 16.1. Information to be provided at the time of the bid

The following information shall be included with the bid. These documents shall be used to determine suitability for placement of purchase orders.

S.N.	Information to be provided	Important Note
1.	The document indicating details of registration of the bidder on the MCA portal.	The document shall be verifiable from the MCA Portal.
2.	Previous supply credentials/ testimonial as required establishing the eligibility.	The document shall contain the contact details (phone number / email-ID) of the purchasers. These may be contacted by the purchaser for performance feedback.

Table 7: Information to be provided with the bid

### 16.2. Information to be supplied with the material consignment

S.No.	Information to be provided	Important Note
1.	Test Certificates for routine tests (as detailed in the QAP) conducted by the manufacturer or third-party agencies.	The test certificates shall be traceable and verifiable.
2.	Test Certificates for acceptance tests(asDetailed in the QAP) conducted by the manufacturer or third-party agencies.	The test certificates shall be traceable and verifiable.
3	Procurement Invoices from OEM for materials	
4.	Complete packing list for the consignment.	

Table 8: Information to be provided with material consignment

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## Annexure- 1

### Format of Power of Attorney for signing of Bid

(To be executed on stamp paper of appropriate value)

Know all men by these presents, We, ..... (name of the firm and address of the registered office) do hereby irrevocably constitute, nominate, appoint and authorise Mr./Ms (Name), son/daughter/wife of ..... and presently residing at ....., who is presently employed with us/the Lead Member of our Consortium and holding the position of ....., as our true and lawful attorney (hereinafter referred to as the "Attorney") to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of our bid for the ..... Project proposed or being developed by the ..... (the "Railways") including but not limited to signing and submission of all applications, bids and other documents and writings, participate in bids and other conferences and providing information/responses to the Railways, representing us in all matters before the Railways, signing and execution of all contracts and undertakings consequent to acceptance of our bid, and generally dealing with the Railways in all matters in connection with or relating to or arising out of our bid for the said Project and/or upon award thereof to us.

AND we hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.

IN WITNESS WHEREOF WE, ....., THE ABOVE NAMED PRINCIPAL HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS ..... DAY OF ....., 20.....

For.....  
(Signature, name, designation and address)

Witnesses:

- 1.
- 2.

Accepted

Notarised  
(Signature, name, designation and address of the Attorney)

Signature and stamp of the bidder

- Note:- 1. TO BE NOTORIZED  
2. TO BE SUBMITTED IN ORIGINAL



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Notes:

- (i) The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.
- (ii) Wherever required, the Bidder should submit for verification the extract of the charter documents and documents such as a board or shareholders resolution/power of attorney in favour of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Bidder.
- (ii) For a Power of Attorney executed and issued overseas, the document will also have to be legalised by the Indian Embassy and notarised in the jurisdiction where the Power of Attorney is being issued. However, the Power of Attorney provided by Bidders from countries that have signed the Hague Legislation Convention 1961 are not required to be legalised by the Indian Embassy if it carries a conforming Apostille certificate.

Signature and stamp of the bidder

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Annexure- 2

## Format for Power of Attorney for Lead Member of Consortium

(To be executed on stamp paper of appropriate value)

Whereas the ..... (the “Railways”) has invited bids from pre-qualified and short-listed parties for the ..... Project (the “Project”).

Whereas, ....., ..... and ..... (collectively the “Consortium”) being Members of the Consortium are interested in bidding for the Project in accordance with the terms and conditions of the Request for Proposals and other connected documents in respect of the Project, and

Whereas, it is necessary for the Members of the Consortium to designate one of them as the Lead Member with all necessary power and authority to do for and on behalf of the Consortium, all acts, deeds and things as may be necessary in connection with the Consortium’s bid for the Project and its execution.

NOW THEREFORE KNOW ALL MEN BY THESE PRESENTS

We, ..... having our registered office at ....., M/s. ...., having our registered office at ....., and M/s. ...., having our registered office at ....., (hereinafter collectively referred to as the “Principals”) do hereby irrevocably designate, nominate, constitute, appoint and authorise M/s. ...., having its registered office at ....., being one of the Members of the Consortium, as the Lead Member and true and lawful attorney of the Consortium (hereinafter referred to as the “Attorney”) and hereby irrevocably authorise the Attorney (with power to sub-delegate) to conduct all business for and on behalf of the Consortium and any one of us during the bidding process and, in the event the Consortium is awarded the Agreement/Contract, during the execution of the Project, and in this regard, to do on our behalf and on behalf of the Consortium, all or any of such acts, deeds or things as are necessary or required or incidental to the submission of its bid for the Project, including but not limited to signing and submission of all applications, bids and other documents and writings, accept the Letter of Award, participate in bidders’ and other conferences, respond to queries, submit information/documents, sign and execute contracts and undertakings consequent to acceptance of the bid of the Consortium and generally to represent the Consortium in all its dealings with the Railways, and/or any other Government Agency or any person, in all matters in connection with or relating to or arising out of the Consortium’s bid for the Project and/or upon award thereof.

AND hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us/Consortium.

IN WITNESS WHEREOF WE THE PRINCIPALS ABOVE NAMED HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS ..... DAY OF ....., 20....

Signature and stamp of the bidder

For.....  
(Signature, Name & Title)

For.....  
(Signature, Name & Title)

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For.....  
(Signature, Name & Title)

(Executants)

(To be executed by all the Members of the Consortium)

Witnesses:

1.

2.

Note:-

1. TO BE NOTORIZED
2. TO BE SUBMITTED IN ORIGINAL

Notes:

(i) The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.

(ii) Wherever required, the Bidder should submit for verification the extract of the charter documents and documents such as a board or shareholders resolution/power of attorney in favour of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Bidder.

(iii) For a Power of Attorney executed and issued overseas, the document will also have to be legalised by the Indian Embassy and notarised in the jurisdiction where the Power of Attorney is being issued. However, the Power of Attorney provided by Bidders from countries that have signed the Hague Legislation Convention 1961 are not required to be legalised by the Indian Embassy if it carries a conforming Apostille certificate.

Signature and stamp of the bidder

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### Annexure- 3

#### Format for Consortium/Association Agreement

The Partners of the Consortium shall provide Consortium/Association Agreement for Association/ Participation which includes at least the followings:

M/s \_\_\_\_\_ having its registered office at \_\_\_\_\_ (hereinafter referred to as) is the Lead Partner of the Consortium/Association and acting as the authorized representative of the Consortium on first part; and

M/s \_\_\_\_\_ having its registered office at \_\_\_\_\_ (hereinafter referred to as \_\_\_\_\_) in the capacity of a Joint Partner of the Consortium/ Association on the other part.

The expression of \_\_\_\_\_ and \_\_\_\_\_ and \_\_\_\_\_ shall wherever the context admits, mean and include their respective legal representatives, successor interest and assigns and shall collectively be referred to as “the Parties” and individually as “the Party”

#### WHEREAS:

Rail Coach Factory, Kapurthala [hereinafter referred to as “Employer”] has invited bids for

[Put tender details here]

#### NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:

- The following documents shall be deemed to form and be read and construed as an integral part of this Consortium/Association Agreement.
  - Invitation for bid;
  - Bid Documents issued by the Employer
  - Any Addendum/Corrigendum to the Bid Documents issued by the Employer
  - The Bid submitted on our behalf jointly by the Authorized Signatory from the Lead Partner.
- The ‘Parties’ have studied the Bid Documents and have agreed to participate in submitting a ‘Bid’ jointly.
- Mr./Ms. \_\_\_\_\_ authorized Signatory of the Lead Partner and whose details are provided as under, shall be the Authorized Signatory of the Consortium/ Association for all intents and purpose. He/She shall have the authority to conduct all business for and on behalf of any and all the Partners of Consortium/Association during the bidding process and in the event the Consortium/Association is awarded the contact, during contract execution.

Name,                      Designation,                      Address,                      Tel/Fax no                      Email ID

- We undertake that
  - The Lead Partner of our Consortium/Association \_\_\_\_\_ (Name of the Lead Partner) shall have the maximum financial stake amongst the other partners of the Consortium/ Association.
  - The distribution of responsibilities in execution of work and the percentage participation amongst various Partners of the Consortium for the subject work shall be as under:

SN	Name of the Partner	Role (Lead Partner/ Partner)	Distribution of Responsibilities in	% Participation
----	---------------------	------------------------------	-------------------------------------	-----------------

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			execution of the work	

**5. JOINT AND SEVERAL RESPONSIBILITY**

The Parties undertake that they shall be jointly and severally liable to the Employer in the discharge of all the obligations and liabilities as per the contract with the Employer and for the performance of contract awarded to their Consortium/Association.

In case one party fails or delays to perform its obligations either partially or totally, it shall be responsible for all the out comings concerned, and upon such conditions the other parties shall be obliged to take measure to perform well all the obligations under the contract with the Employer.

**6. ASSIGNMENT AND THIRD PARTIES**

The Parties shall cooperate throughout the entire period of this Consortium/Association Agreement on the basis of exclusivity and neither of the parties shall make arrangement or enter into agreement either directly or indirectly with any other party or group of parties on matters relating to the Work except with prior written consent of the other party.

**7. EXECUTIVE AUTHORITY**

The said Consortium/Association through its Authorized Signatory (as specified above) shall receive instructions, payments from the Employer. The management structure for the work shall be prepared by mutual consultations to enable completion of the work of quality requirements within permitted cost and time.

**8. GUARANTEES**

Till the award of the work, all the Bank guarantees to the Employer shall be furnished in the name of the Consortium/Association or by the Lead Partner on behalf of the Consortium/Association which shall be legally binding on all the partners of the Consortium/Association.

**9. DOCUMENTS & CONFIDENTIALLY**

Each party shall maintain in confidence and not use for any purpose other than those related to the project all commercial and technical information received or generated in the course of preparation and submission of the Bid.

**10. ARBITRATION**

Any dispute, controversy or claim arising out of or relating to this agreement shall be settled in the first instance amicably between the parties. If an amicable settlement cannot be reached as above, it will be settled by \_\_\_\_\_ [Bidder to specify]

**11. VALIDITY**

This Agreement shall remain in force till the occurrence of the earliest to occur of the following, unless by mutual consent, the Parties agree in writing to extend the validity for a further period.

- The bid submitted by the Consortium/Association is declared unsuccessful, or
- Cancellation/shelving of the project by the Employer for any reason prior to award of work
- Execution of detailed Association/Consortium agreement by the parties, setting out detailed terms after award of work by the Employer, substantially covering the requirement as mentioned in Bid Documents.

12. This Consortium/Association Agreement shall be construed under the laws of India.

**13. NOTICES**

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The name, addresses and fax numbers of Authorized Signatory of the other partners of the Consortium/Association to which notices may be given in writing by fax confirmed by registered mail or commercial courier shall be as under:

- a) \_\_\_\_\_ [Name], \_\_\_\_\_ [Designation], \_\_\_\_\_ [Address], \_\_\_\_\_ [Ph. No., Fax No. , E-mail ID]
- b) \_\_\_\_\_ [Name], \_\_\_\_\_ [Designation], \_\_\_\_\_ [Address], \_\_\_\_\_ [Ph. No., Fax No. , E-mail ID]
- c) \_\_\_\_\_ [Name], \_\_\_\_\_ [Designation], \_\_\_\_\_ [Address], \_\_\_\_\_ [Ph. No., Fax No. , E-mail ID]

14. Any Other Clause, the Bidder wish to include

(For Bidders in India to be execute on non-judicial stamp paper of appropriate value. For Bidders from outside India, to be executed according to the applicable laws in the Bidder's country and by taking into account the Notes shown below).

Notes:

1. In case of existing Consortium/Association, the certified copy of Consortium/Association Agreement may be furnished.
2. The mode of execution should be in accordance with the procedure, if any, laid down by the applicable law in the bidder's country and the charter documents of the executants(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.
3. Whenever required, the Bidder should submit for verification the extract of the charter documents and the shareholder resolution in favour of the person executing this document on behalf of the bidder.
4. For a required document executed and issued overseas, the document will also have to be legalized by the Indian Embassy in the Bidder's country and notarized in the jurisdiction where it is being issued. However, documents provided by Bidders from countries that have signed the Hague Legislation Convention 1961 are not required to be legalized by the Indian Embassy, if they carry a conforming Appostille certificate.

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## ANNEXURE 4

### CONFIDENTIALITY & PERMITTED USE UNDERTAKING

(On Bidders Letter Head)

I, \_\_\_\_\_ (the name of tenderer/contractor), the undersigned (hereafter addressed as contractor), do hereby declare and confirm that I am aware that I may be assigned by Rail Coach Factory, Kapurthala, to render certain services as tendered for in tender number \_\_\_\_\_ date \_\_\_\_\_.

In connection therewith, I hereby undertake and agree as follows:

#### Certain Definitions

(a) “Confidential Information” means any data, documents, materials, or other information disclosed to me in connection with the Services, in any form whatsoever, whether orally, visually, in writing or otherwise (including in computerized or electronic form).

(b) “Permitted Purpose” means the use of the Confidential Information to perform the Services.

#### The Contractor’s Confidentiality Obligations

(a) I understand that the Contractor is subject to confidentiality obligations pursuant to the information supplied as a part of specifications for the abovementioned tender.

#### Undertakings

(a) I undertake to conduct myself and render services with a view to ensuring full compliance of Conditions of Contract for the Provision of Services.

(b) I shall:

(i) use the same care and discretion to avoid disclosure, publication, or dissemination of the Confidential Information as I use with my own similar information that I do not wish to disclose, publish, or disseminate; and,

(ii) Use the Confidential Information solely for the Permitted Purpose.

(c) I hereby undertake that in the case of this tender being awarded to another party, or upon the request of the Rail Coach Factory, Kapurthala, I shall immediately return (or destroy) all Confidential Information

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disclosed to me or to which I had access during or as a result of the process of tendering, together with all copies thereof.

(d) I understand that in the case of the contract being awarded to us, this requirement of confidentiality stands and shall be applicable throughout the contract. I shall immediately return (or destroy) all Confidential Information disclosed (together with all copies thereof) to me or to which I had access during or because of the process of servicing the tender and the following contract.

SIGNED:

Name:

Date:

Place:



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## ANNEXURE-5

### QAP Framework

#	Components & Operation	Characteristic to be Checked	Type/Method of Checks	Acceptance Norms	Format of Record	Agency					Remarks
						Performed By	Witnessed By	Review & Approval By			
A	B	C	D	E	F	G					H
1	Mechanical design and fabrication drawing	Design and drawings.	Review and approval by CDE/CE DE	As per approved drawing & specification	Submission of drawing by vendor	Vendor	Vendor	RCF			
2	Raw material & consumable	Sources of raw material.	Review and approval by CDE/CE DE/RCF	As per approved drawing & specification	Material test certificates	Vendor	Rites / Vendor	Rites/RCF			
		Physical and chemical testing methodology.									
		Check points									
		Acceptance WTC items.									
		Identification of bought out of item/process/hardware etc									
3	In Process	Flow chart of processes.	Review and approval by firm	As per approved drawing	Manpower qualifi	Vendor	Vendor	RCF			

#	Compon ents & Operatio n	Characteris tic to be Checked	Type/Met hod of Checks	Accepta nce Norms	Format of Record	Agency					Rem arks
						Perfor med By	Witne ssed By	Review & Approval By			
A	B	C	D	E	F	G					H
				& specifica tion	cation record						
		Holding points in process									
		Identificati on of special process and control									
		In-process inspection and test detail									
		Dealing with non- conformin g items/raw material.									
		Quality control procedure for bought out items			Materi al test certific ates						
		Stage inspection									
		Rectificati on and conformity									
4	Material Identific ation and sample collectio n	Material Identificati on with MTC and sample collection	Identificat ion and testing of material (Chemical & Mechanic al Tests)	Related drawing & specifica tion	Materi al Identifi cation Report and Sample analysi s report	Vend or	Rites / Vendor	Rite s/R CF			

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#	Compon ents & Operatio n	Characteris tic to be Checked	Type/Met hod of Checks	Accepta nce Norms	Format of Record	Agency					Rem arks
						Perfor med By	Witne ssed By	Review & Approval By			
A	B	C	D	E	F	G					H
5	All Brought item	Reputed make as per Technical Specificati on	Instructio n manual	Related standards	Details product specifi cation	Vend or	Rites / Vendor	Rite s/R CF			
6		Flooring arrangeme nt: 1.Visual 2 Leakage check of PVC joints  3 Proof of procureme nt from OEM	As per Drawing and Specificat ions								
		Partition frame	As per Drawing and Specificat ions								
		Seating arrangeme nt: 1.Arrange ment Dimension al Check 2.Function al Check	As per Drawing and Specificat ions								
		Doors: 1.Function al Checks 2.Arrange ment Dimension al Check	As per Drawing and Specificat ions								
		Paneling & Ceiling: 1.Visual	As per Drawing and								

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#	Compon ents & Operatio n	Characteris tic to be Checked	Type/Met hod of Checks	Accepta nce Norms	Format of Record	Agency					Rem arks
						Perfor med By	Witne ssed By	Review & Approval By			
A	B	C	D	E	F	G					H
		3 Proof of procureme nt from OEM	Specificat ions								
		Lavatory Module and sanitation facilities: 1.Function al Check 2.Leak Check/	As per Drawing and Specificat ions								
		CCTV 1.Function al Check	As per Drawing and Specificat ions								
		Window: 1.Function al Check 2.Leak Check	As per Drawing and Specificat ions								
		Curatin 1.Visial Check	As per Drawing and Specificat ions								
		Kitchen Area: 1.Function al Check of each fitting 2, Visual	As per Drawing and Specificat ions								
		Master bed room, guest room, Lounge room &	As per Drawing and Specificat ions								

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#	Components & Operation	Characteristic to be Checked	Type/Method of Checks	Acceptance Norms	Format of Record	Agency					Remarks
						Performed By	Witnessed By	Review & Approval By			
A	B	C	D	E	F	G					H
		observation room									
		Bathroom	As per Drawing and Specifications								
		Light &electrical Fittings: 1.Functional check 2.Safety checks	As per Drawing and Specifications								
7	Final inspection	Pull down test	As per Drawing and Specifications		Inspection Report	Vendor	Rites / Vendor	Rites/R CF	Vendor		
		Alignment Orientation Dimensions	Visual Measurement	Final Approved Drawings							
		Leak Testing	Shower Test	Shower test	Test reports	RCF	Rites / Vendor	RC F			
8	Cleaning and Packing	Cleaning of equipment	Visual	Approved procedure/ASTM	Report	Vendor	Rites / Vendor	Rites/R CF	Vendor		
		Packing	Visual	Safe and suitable as per standard engineering practice							

Annexure-A	Flooring Arrangement
<b>Scope:</b>	<ul style="list-style-type: none"> <li>(i) Floor boards and Decoupling elements as per drawing no. RA41145.</li> <li>(ii) PVC flooring as per the RDSO specification RDSO/2006/CG-12 as per drawing no. RA41146.</li> <li>(iii) Fire retardant adhesive to MDTs-237</li> <li>(iv) Floor End Profile and Skirting with extrusion.</li> <li>(v) Corridor area of 716 mm width shall be covered with 8-9 mm thick coral duo FR flock flocked floor covering meeting following parameters as stated below.</li> <li>(vi) 3 to 3.5 mm thick flocked floor covering to be provided in Lounge room, master bed room guest bed room.</li> <li>(vii) In kitchen area, Z web medium traffic Scrapper matting below induction based cooking system to prevent water ingress meeting following parameters as per drawing no. RA41146.</li> </ul>
<b>Special Condition:</b>	<ul style="list-style-type: none"> <li>(i) Color scheme, pattern and shade shall be decided at the time of design finalization. RCF decision in this regards shall be final.</li> <li>(ii) The texture and color of the carpets/mating and PVC shall match with the interior furnishing.</li> <li>(iii) Firm may offer any better alternative design meeting all parameters specified in the relevant RCF/RDSO specification.</li> <li>(iv) Covering of PVC with tetron cloth etc, to avoid damage/scratches during working in coach.</li> <li>(v) The reference drawings to be followed.</li> <li>(vi) The structural adhesive to be used for fixing shall be of reputed brand with adequate strength and approval of CDE/CEDE/RCF is required for approval of brand of Adhesive.</li> <li>(vii) The Top covering joints should be suitable joined with OEM recommended material.</li> <li>(viii) There shall be no joints visible of on the flooring system and leveling has to be maintained.</li> <li>(ix) Water drainage shall be fail proof withoutany water ingress.</li> </ul>
<b>Acceptance Criteria</b>	<ul style="list-style-type: none"> <li>(i) Technical Data Sheet of the OEM and Test certificates for above listed parameters conducted by OEM or any reputed NABL accredited Lab.</li> <li>(ii) Procurements invoices of the materials are to be submitted.</li> <li>(iii) Color, pattern &amp; shades of carpets/mating and PVC matting to be got approved from CDE/CEDE/RCF.</li> </ul>

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Dual FR Flocked Floor Covering:

SN	Requirement	Parameters	Test
1	Total thickness	8- 9	ISO 1765
2	Total weight	3000-3400 g/m <sup>2</sup>	ISO 8543
3	Pile installation weight	670 g/m <sup>2</sup>	ISO 8543
4	Pile thickness	6.0 mm ( Min)	ISO 1766
5	Pile material	100% polyamide of which 66% is regenerated Econyl polyamide	
6	Light fastness	5 (Min)	EN-ISO 105/B02
7	Electrical resistance	108 $\Omega$ (Min)	ISO 10965
8	Contact sound insulation	$\Delta L_w$ = approx 29 dB	EN-ISO 717-2
9	Area of use	Heavy Use	
10	Slip resistance $\mu \geq 0.30$ $\mu \geq 0.30$ $\mu \geq 0.30$ L	$\geq 0.30$ $\mu$	EN 13893
11	Body voltage	< 2 kV	ISO 6356
12	Thermal resistance	0.140 m <sup>2</sup> K/W (Min)	ISO 8302

Dual FR Flocked Floor Covering for Master bed room, guest room, Lounge room :

SN	Requirement	Parameters	Test
(i)	Total thickness	3-3.5 mm	ISO 1765
(ii)	Total weight	1200-1300 g/m <sup>2</sup>	ISO 8543
(iii)	Pile thickness	2.0 mm ( Min)	ISO 1766
(iv)	Pile material	100% polyamide	
(v)	Light fastness	6 (Min)	EN-ISO 105/B02
(vi)	Electrical resistance	108 $\Omega$ (Min)	ISO 10965
(vii)	Dimensional stability	$\leq 0.20\%$	ISO 2551
(viii)	Contact sound insulation	$\Delta L_w$ = approx 29 22	EN-ISO 717-2
(ix)	Area of use	Heavy Use	
(x)	Slip resistance	$\mu \geq 0.30$ L	EN 13893
(xi)	Thermal resistance	0.040 m <sup>2</sup> K/W (Min)	ISO 8302

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Scraper Matting:

SN	Requirement	Parameters	Test
(i)	Material	Unbacked, non-woven, open and porous floor matting made from continuous vinyl filaments bonded together	
(ii)	Total thickness	16-17 mm	ASTM D418-68
(iii)	Total weight	4-4.5 k g/m <sup>2</sup>	ASTM D418-68
(iv)	Flammability	Smoke density DM=404	ASTM -662-95
(v)	Microbiological Properties	Passes – Inhibiting to fungal growth in the mat Electrical	ASTM G-21-90
(vi)	Dielectric Strength	12.0 Kilovolts	ASTM D 149



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Z-Web Medium Traffic Scraper Matting :

SN	Requirement	Parameters	Test
(i)	Material	Structure of vinyl filaments bonded to supporting ribs, embedded in a durable vinyl backing	
(ii)	Total thickness	10.5-11.5 mm	ASTM D418
(iii)	Total weight	4-4.5 k g/m <sup>2</sup>	ASTM D418
(iv)	Flammability  ( ) (no ignition) Meets or exceeds requirement for NFPA Class I. Recommended critical average radiant flux to b	Pill Test- Passes  Flooring Radiant- 0.80-0.85 watts/cm <sup>2</sup>	OC FF 1-70  ASTM E-648
(v)	Microbiological Properties	Passes – Inhibiting to fungal growth in the mat	ASTM G-21-90
(vi)	Chemical resistant	7 days test	

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Annexure-B	Amenities for the Master Bedroom:
Scope:	The arrangement of master bedroom shall be as per reference drawing no. RA61124.
<b>Special Condition:</b>	<ul style="list-style-type: none"> <li>(i) 2 Nos. of single bed with Seasoned wood frame and waterproof plywood as per IS:303-89 with veneer ,with drawer type sunk in-box of approximate size for suitcase as shown in general arrangement drawings.</li> <li>(ii) 6"/5" Memory foam mattress of make Wake-fit\ Sleepy-cat\ COIR FIT\ Kurl-on with Pillows.</li> <li>(iii) Seasoned-wood side tablewith polished finish of suitable size for master bedroom.</li> <li>(iv) One dressing table with cup boards, stools and drawers (of seasoned wood with large body size mirror with beveled edges and etched lining near border along, along with cushioned seat</li> <li>(v) Seasoned wood Study table with Study chair approved shade with teakwood chair along with adequate P.U. cushion covered with woolen upholstery matching with sofa's upholstery in seating area.</li> <li>(vi) One no of Folding stool to drg. no. MI004491</li> <li>(vii) One wardrobe of 19mm MDF/Composite board laminated with laminates of 'Formica or equivalent make with concealed lock arrangement. The inner surface area of wardrobe should be pasted with blazer cloth of maroon shade. LED Lights provided inside ward robe should switch on as soon as wardrobe is opened and should switch off as soon as it is closed. The rating of limit switch should be <b>0.5A(max)</b> and should be of reputed make.</li> <li>(viii) One Bottle holder &amp; two glass holders of 'Metallic finish or golden shade' on partition frame suiting to interior of room.</li> <li>(ix) Automatic hand sanitizer</li> <li>(x) 02Nos. Mobiles holder near mobile charger</li> <li>(xi) Light/Fan/Mobile charging points etc. as mentioned at Cl. 7.2.1 above.</li> </ul>

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Annexure-C	Amenities for the Attendant Room:
Scope:	<p>2 Nos.cup-board of minimum 19mm MDF/Composite board of reputed make with 3 shelves laminated with laminates of 'Formica or equivalent make with concealed lock arrangement and metallic handles.</p> <p>1 No Mirror,2 nos. 3 peg Coat hooks,1 Foldable Snack table mounted on side wall, 3 Nos. Mobile Holders, 6 Bottle Holders.</p> <p>(xii) Light/Fan/Mobile charging points etc. as mentioned at Cl. 7.2.1 above</p>

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Annexure-D	Amenities for Guest Bedroom:
Scope:	The arrangement of master bedroom shall be as per drawing no. RA61125.
<b>Special Condition:</b>	<ul style="list-style-type: none"> <li>(i) Seasoned wood bed (size 1905x830 mm).</li> <li>(ii) Upper berth with stop arrgt to drawing no. WGFAC-0-1-002 Col VI &amp; III.</li> <li>(iii) Seasoned wood Study table with Study chair approved shade with teakwood chair along with adequate P.U. cushion covered with woolen upholstery matching with sofa's upholstery in seating area.</li> <li>(iv) One wardrobe of 19mm MDF/Composite board laminated with laminates of 'Formica or equivalent make with concealed lock arrangement. The inner surface area of wardrobe should be pasted with blazer cloth of maroon shade. Lights provided inside ward robe should switch on as soon as wardrobe is opened and should switch off as soon as it is closed. The rating of limit switch should be 0.5A (max) and should be of reputed make.</li> <li>(v) One Bottle holder &amp; two glass holders of 'Metallic finish or golden shade' on partition frame suiting to interior of room.</li> <li>(vi) One dressing table with cup boards, stools and drawers (of teakwood with large body size mirror with beveled edges and etched lining near border along, along with cushioned seat</li> <li>(vii) Automatic hand sanitizer.</li> <li>viii. 02 Nos. Mobiles holder near mobile charger</li> <li>(ix )Light/Fan/Mobile charging points etc. as mentioned at Cl. 7.2.1 above.</li> </ul>

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Annexure-E	Steno room:
Scope:	<p>One cup-board of 19mm MDF/Composite board of reputed make with 3 shelves laminated with laminates of 'Formica or equivalent make with concealed lock arrangement and metallic handles.</p> <p>1 No Mirror,1 nos. 3 peg Coat hooks,1 Foldable Snack table mounted on side wall,2 Nos. Mobile Holders, 2 Bottle Holders.</p> <p>(iii) Light/Fan/Mobile charging points etc. as mentioned at Cl. 7.2.1 above</p>
Special Condition:	<b>The location, Brand/Make, Design of amenities requires approval of CDE/CEDE/RCF</b>

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Annexure-F	Amenities for Observation Room:
Scope:	The arrangement of observation room will be, in general, as per drawing number RA61126.
<b>Special Condition:</b>	<ul style="list-style-type: none"> <li>i. 2-Seater Sitting arrangement of suitable size of teakwood with cushions of Sleepwell or any other reputed make .</li> <li>ii. Wall mounted folding table of MDF/Composite board of suitable thickness laminated with laminates of Formica on end wall should be provided along the width of coach. The depth of table should be sufficient to accommodate paper size of A2. The mounting arrangement of table should not infringe with leg of human being sitting on chair.</li> <li>iii. 3 Wooden chairs for observation room of teakwood with P. U. cushion &amp; woolen upholstery matching with sofa's upholstery in seating area.</li> <li>iv. The gauges of air brake should be located on the partition in such a way that it gives an elegant look. The gauges should be covered (except protective glass) with suitable panels flushed with protective glass. The gauges will be free supply item of RCF.</li> <li>v. Sealed window unit of observation windows shall be fitted with suitable curtain with pelmet arrangement.</li> <li>vi. Suitable maintenance window to be provided in end wall paneling to access the tail lamp from inside the observation room.</li> <li>vii. 02 Nos. Mobiles holder near mobile charger</li> <li>viii. Light/Fan/Mobile charging points etc. as mentioned at Cl. 7.2.1 above</li> </ul>

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<b>Annexure-G</b>	<b>Amenities for Lounge Room:</b>
<b>Scope:</b>	<ul style="list-style-type: none"> <li>i. 5 Seater teakwood sofas in L shape of suitable size with cushion of Sleep well or reputed make to be provided.</li> <li>ii. One folding dining table of teak wood of approved shade (in seating area) as per general arrangement to drawing number RA61114.</li> <li>iii. One teakwood center table in teak finish of suitable size with 12 mm glass top &amp; glass base.</li> <li>iv. Four chairs for dining table of teak wood &amp; PU cushion covered with woolen upholstery of approved shade matching with sofa's upholstery in seating area.</li> <li>v. One teakwood corner table in teak finish of suitable size with 12 mm glass top &amp; glass base.</li> <li>vi. 03 Nos. Mobiles holder near mobile charger</li> <li>vii. Light/Fan/Mobile charging points etc. as mentioned at Cl. 7.2.1 above</li> </ul>
<b>Special Condition:</b>	Proper sealing of body side doors shall be ensured by provision of Rubber packing.

Annexure-H	Kitchen Arrangement																												
Scope:	<p>The mini pantry comprises of the following items as per under given details &amp; working at 230VAC :</p> <table><tr><th>S.N.</th><th>Item Desc.</th><th>Make</th><th>QPC</th></tr><tr><td>1.</td><td><b>Electric Hot Plate, 1.5-2kW (02 nos. - Twin type design) (with Stainless steel cover plate over heating element)</b></td><td>Any Commercial standard brand</td><td>01</td></tr><tr><td>2.</td><td>Chimney</td><td>Any Commercial standard brand</td><td>01</td></tr><tr><td>3.</td><td>Refrigerator, 310- 350 Ltr</td><td>Any Commercial standard brand</td><td>01</td></tr><tr><td>4.</td><td>Microwave Oven, 28L</td><td>Any Commercial standard brand</td><td>01</td></tr><tr><td>5.</td><td>Water Purifier with RO</td><td>Any Commercial standard brand</td><td>01</td></tr><tr><td>6.</td><td><b>1.5kW- 2kW, 230VAC, Horizontal Storage type Geyser of 15Ltrs. Capacity.</b></td><td>Any Commercial standard brand</td><td>01</td></tr></table> <p>(i) The Pantry Equipments are to be fitted within the space as per the layout RA 90030 alt f.</p> <p>(ii) The pantry Equipments shall be stacked in modular way for easy access by the passengers</p> <p>(iii) The complete Pantry Shall be modular in stainless steel sandwich construction and the cupboards and storage spaces shall be in stainless steel only. The locks shall be of standard make of Hettich, South Co or Dirak.</p> <p>(iv) The water connection with required storage and water lifting mechanism is in the scope of the firm.</p> <p>(v) All the brackets, Back Pieces shall be in the scope of the Firm</p> <p>(vi) All the Equipments shall comply electrical safety standards.</p> <p>(vii) The microwave oven and the heating burner shall be integrated unit of size suitable to the layout.</p> <p><b>The contractor shall submit the complete details of the pantry equipments along with load calculation to the office of CEDE/RCF before execution of the pantry equipments in the coach.</b></p> <p>Notes:</p> <ul style="list-style-type: none"><li>All tools &amp; machineries required for the furnishing and fitment of Electrical items will be provided by the tenderer.</li><li></li><li><b>Supply of all electrical items in the scope of bidder shall be taken up after prototype approval from CEDE/RCF</b></li></ul>	S.N.	Item Desc.	Make	QPC	1.	<b>Electric Hot Plate, 1.5-2kW (02 nos. - Twin type design) (with Stainless steel cover plate over heating element)</b>	Any Commercial standard brand	01	2.	Chimney	Any Commercial standard brand	01	3.	Refrigerator, 310- 350 Ltr	Any Commercial standard brand	01	4.	Microwave Oven, 28L	Any Commercial standard brand	01	5.	Water Purifier with RO	Any Commercial standard brand	01	6.	<b>1.5kW- 2kW, 230VAC, Horizontal Storage type Geyser of 15Ltrs. Capacity.</b>	Any Commercial standard brand	01
S.N.	Item Desc.	Make	QPC																										
1.	<b>Electric Hot Plate, 1.5-2kW (02 nos. - Twin type design) (with Stainless steel cover plate over heating element)</b>	Any Commercial standard brand	01																										
2.	Chimney	Any Commercial standard brand	01																										
3.	Refrigerator, 310- 350 Ltr	Any Commercial standard brand	01																										
4.	Microwave Oven, 28L	Any Commercial standard brand	01																										
5.	Water Purifier with RO	Any Commercial standard brand	01																										
6.	<b>1.5kW- 2kW, 230VAC, Horizontal Storage type Geyser of 15Ltrs. Capacity.</b>	Any Commercial standard brand	01																										
Special Condition:	<ul style="list-style-type: none"><li>Granite top of Jet Black colour.</li><li>Stainless steel sink with drain board of KAFF/GLEN/FRANKE make.</li></ul>																												



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	<ul style="list-style-type: none"> <li>• Dish rack with drip tray of KAFF/GLEN or commercially available standard makes to be provided. Proper ward robe has to be provided to cover the dish rack.</li> <li>• Proper cup boards of suitable height, starting from floor level of 1600 mm should be provided across the width of coach (excluding electrical cubicle) on end wall.</li> <li>• Pull out multipurpose baskets (telescopic slides) of commercially available standard make to be used. There should be proper wardrobe for pull out baskets suiting to interior decor of kitchen.</li> <li>• Cupboards &amp; racks to suit kitchen requirements.</li> <li>• Drain pipe &amp; bottom of stainless steel sink should be covered with suitable leaf type hinged panels. There should be provision for keeping detergent powder, soaps &amp; scrapper etc. required for washing utensils.</li> <li>• There should be foldable table in space between cubicle panel and kitchen table. There should be space for keeping two LPG cylinders of standard size. If required, pocket in head stock can be used for keeping cylinders.</li> <li>• Chimney arrangement of commercially available standard make (power supply requirements should not exceed 350W) with proper cup boards of suitable height, starting at a height of 1600mm from floor level, covering the chimney arrangement.</li> <li>• Supply Fixing of Refrigerator on proper wooden stand of 165 Ltr capacity of suitable size to be provided</li> <li>• 2 nos. of fire extinguishers to Drg. No. CC64181.</li> <li>• 2 No stainless steel stool of appropriate size for sitting in kitchen.</li> <li>• All type of Piping from Auxiliary tank to taps &amp; drainage.</li> <li>• 2 No Metallic Dustbin.</li> </ul>
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Annexure-I	Seats and Berths arrangement in Guest Room, Steno room & attendant room:
<b>Special Condition:</b>	<p>Theseat&amp;berthshallhavefollowingmajorconstituentscomplyingwiththefollowingrequirements:</p> <p>ThebiddershallmanufactureseatandberthswithpreinspectedmaterialfromM/sRITESasper followingspecification:</p> <p>(1) Cushioningmaterial:</p> <ul style="list-style-type: none"> <li>TheCushioningMaterialtobeprocuredfromtheapprovedsourcesofRCFV endorDirectory.</li> <li>TheCushioningmaterialshallbeeitherPUfoamtospecificationRDSO/2007/CG-04 Rev-1 or silicon foam to RDSO specification RDSO/2013/CG-13 and fire propertiescomplianttoR21HL-3ofEN45545standard.</li> <li>CushionmaybedirectlymoldedorfabricatedfromSlab.Thecontinuousslab tobeused for manufacturing of the cushion shall have thickness not less than theminimumthicknessofthecushionspecifiedinthedrawing.</li> <li>The fire retardant tests as per EN 45545 -2as specified in specification may also beconductedfromRDSOapprovedLabsorfromthelabsasprescribedintheres pectivespecification.</li> </ul> <p>(2) Felt:</p> <ul style="list-style-type: none"> <li>TheFeltClothtobeusedasspecifiedintherelevantdrawings.</li> <li>FelttobeprocuredfromtheapprovedsourcesofRCFVendordirectoryf orfirebarrierCloth.</li> <li>ThefunctionalrequirementsshallbeasperMCFSpecMMDTS-19021Rev-03orlatestwithamendments.</li> <li>The fire retardant tests as per EN 45545 -2as specified in specification may also beconductedfromRDSOapprovedLabsorfromthelabsasprescribedintheres pectivespecification.</li> </ul> <p>(3) TopcoveringArtificialLeather:</p> <ul style="list-style-type: none"> <li>ThetopcoveringartificialleathertobeprocuredfromapprovedsourcesofRCFV endorDirectory.</li> <li>ThefunctionalrequirementsshallbeasperRDSO/2008/CG-07withlatestamendmentsand corrigendum. The upholstery shall meet the all parameters as specified in thespecification.</li> </ul>

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Annexure-J	Lavatory Modules and amenities
<b>Special Condition:</b>	<p>Requirements of Sanitary facilities/Amenities for Furnishing of Bathrooms cum Lavatories of HB AC EOG Inspection Carriage.</p> <p><b>A. Flooring and Wall Paneling of Master Bathroom cum Lavatory, Guest bathroom cum Lavatory, Steno &amp; Attendant bathroom cum Lavatory :</b></p> <ol style="list-style-type: none"> <li>Flooring of Master Bathroom cum Lavatory, Guest bathroom cum Lavatory, Steno bathroom cum Lavatory &amp; Attendant bathroom cum Lavatory floor shall be similar to drawing number LRAAC-4-1-001. However sizes shall be as per Layout no. RA90030.</li> <li>Matt finish, Anti skid type of Kajaria make tiles are to be provided on the floor. Proper care should be taken while providing slope.</li> <li>A step of 25mm is to be provided between flooring of shower area and rest of the flooring to avoid sprinkling of water from shower area to rest of area. The firm should take adequate measures of slope to prevent water ingress from shower area to rest of area.</li> <li>The drains at suitable location with mesh of stainless steel flushed with floor should be provided. For location of drain holes of wash basin and Lavatory Drawing No.RA63249 may be referred.</li> <li>For location of Commode hole, drawing no. RA63247 may be referred.</li> <li>Z web medium traffic Scrapper of as per sizes of Master Bathroom, Guest Room, Steno &amp; Attendant Bathroom floor to layout no. RA90030 to be provided.</li> <li>On partition frames &amp; sidewall of bathrooms, small size PVC tiles of reputed make matching with floor tiles may be provided along with small border of different colour on upper most tiles in wall/PF in uniform pattern of tiles. Suitable backing base for pasting of tiles shall be in scope of the firm. However, firm shall take the prior approval of RCF before exercising PVC tiles.</li> </ol> <p><b>Special Condition:</b></p> <ol style="list-style-type: none"> <li>Color scheme, pattern and shade of floor tiles and wall tiles shall be decided at the time of design finalization. RCF decision in this regards shall be final.</li> <li>The structural adhesive to be used for fixing shall be of reputed brand with adequate strength and approval of CDE/RCF is required for approval of brand of Adhesive.</li> <li>The Top covering joints should be suitable joined with OEM recommended material.</li> <li>Technical Data Sheet of the OEM and Test certificates for above listed parameters conducted by OEM or any reputed NABL accredited Lab. Procurement invoices of the materials are to be submitted.</li> <li>There shall be no joints visible of on the flooring system and leveling has to be maintained.</li> <li>Water drainage shall be fail proof without any water ingress</li> </ol> <p><b>B. Sanitary facility arrangement for Master bathroom cum Lavatory and Guest bathroom cum Lavatory:</b></p> <p><b>Scope:</b> Location of the fittings should be, in general, similar to as shown in drawing number LRAAC-6-3-004 &amp; LRAAC-6-3-005. However, the supplier should get the drawing of location of fittings approved before supply. Amenities for both Master Bathroom cum Lavatory and Guest Bathroom cum Lavatory in general, shall include following:</p> <ol style="list-style-type: none"> <li>All type of Piping from Auxiliary tank to Bath cum Lavatory, taps &amp; drainage.</li> <li>The auxiliary water Tank shall be suitable concealed inside the lavatory paneling.</li> <li>Ceramic W.C. of Parryware / Cera/ Jaquar/ Vitra/ Duravit / Aquant/ TOTO / Kohler make, cascade type with dual discharge cistern complete with plastic cover. Sole single piece floor toilet commode with S-Trap, dual flush cistern fitting with horizontal distance between wall line and centre of waste outlet hole shall be 100 mm to 140mm. The Jaquar Model SLS-WHT-</li> </ol>

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	<p>6851S110PP is the suiting model. Any equivalent model of above said brand shall be used. The shade of WC should be Champagne in master bathroom and Ivory in guest bathroom. W.C. to be connected with the retention tank.</p> <p>iv. WC Connections with retention tanks shall be in the scope of supplier i.e Adapters (item 3 to 6) of drawing RA63247 and to be modified accordingly if commode waste outlet hole and wall line distance deviate from the range 100 mm to 140 mm.</p> <p>v. Vanity wash basins with pedestal of Parryware / Cera/ Jaquar/ Vitra/ Duravit / Aquant/ TOTO / Kohler make of Champagne shade in master bathroom and Ivory shade in guest bathroom.</p> <p>vi. Telephonic shower of continental series of Jaquar/ Kohler/ Roca/Grohe make.</p> <p>vii. Decorative mirror with beveled edges and etched lining near border. The size should be compatible with wash basin.</p> <p>LED type Mirror light to Drg. No. CC76471 as mentioned at Cl. 7.2.1 (S.No. (A) (2)) suitable for 110VAC/DC shall be provided in each LAV area.</p> <p>LED type Spot Light, 5W: Qty-2 nos. each lavatory to Drg. No. CC76467 as mentioned at Cl. 7.2.1 (S.No. (A) (10)) suitable for 110VAC/DC shall be provided in LAV area.</p> <p>230VAC 300MM Sweep Wall Bracket Mounted type high speed fan as per Cl. 7.2.1 (S.No. (B) (i)).</p> <p>viii. 1.5KW-2KW, 230V AC, Horizontal geyser of 15 liters capacity (with PTC Heating Elements of suitable rating) preferably to cat. no. 15 AL of AO Smith/ American Micronic/ Racold Andris / Venus Magma /V- Guard make or equivalent.</p> <p>Exhaust fan as per Cl. 7.2.1 (S.No. (B) (ii) to drg. No. ICF/SK-7-6-177, Alt. b.</p> <p>3-Pin Socket for Shaving: 01 no. each lav.</p> <p>16A Switch Socket shall be provided near each Geyser in lavatory area.</p> <p>ix. One towel rack with coat hook of Continental series of Jaquar make Jaquar/ Kohler/ Roca/Grohe</p> <p>x. Suitable shelf for towel stacking at corner in shower area.</p> <p>xi. Health faucets of allied series of Jaquar/ Kohler/ Roca/Grohe make.</p> <p>xii. Other bathroom fittings &amp; taps of Continental series of Jaquar/ Kohler/ Roca/Grohe make.</p> <p>xiii. Matching bucket, mug &amp; bath stool (12" high) of reputed make in shower area.</p> <p>xiv. Curtain in shower area with provision of adequate sealing with floor (to avoid any splashing of water from the shower area to rest of the bathroom).</p> <p>xv. Odor control system as per RDSO specification No.: RDSO 2008/CG-11.</p> <p>xvi. Napkin Holders</p> <p>xvii. Liquid soap dispenser</p> <p>xviii. Automatic hand sanitizer</p> <p><b>C. Sanitary facility arrangement for Steno and Attendant Bathroom cum Lavatories:</b></p> <p><b>Scope:</b> Location of the lavatory fittings in general should be similar to as shown in drawing number LRAAC-6-3-002 Col-1 &amp; LRAAC-6-3-002 Col-2. However, the supplier should get the drawing of location of fittings approved before supply. Amenities for both Steno and Attendant Bathroom cum Lavatories in general, shall include following:</p> <p>i. All type of Piping from Auxiliary tank to Bath cum Lavatory, Taps &amp; drainage.</p> <p>ii. The auxiliary Tank shall be suitable concealed inside the lavatory module.</p> <p>iii. Ceramic W.C. of Parryware / Cera/ Jaquar/ Vitra/ Duravit / Aquant/ TOTO / Kohler make, cascade type with dual discharge cistern complete with plastic cover. Sole single piece floor toilet commode with S-Trap, dual flush cistern fitting with horizontal distance between wall line and centre of waste outlet hole shall be 100 mm to 140mm. The Jaquar Model SLS-WHT-6851S110PP is the suiting model. Any equivalent model of above said brand shall be used. The shade of WC should be Champagne in master bathroom and Ivory in guest bathroom. W.C. to be connected with the retention tank.</p>
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	<p>iv. WC Connections with retention tanks shall be in the scope of supplier i.e Adapters (item 3 to 6) of drawing RA63247 and to be modified accordingly if commode waste outlet hole and wall line distance deviate from the range 100 mm to 140 mm.</p> <p>v. Ceramic wash basins with pedestal of Parryware / Cera/ Jaquar/ VitrA/ Duravit / Aquant/ TOTO / Kohler make of Champagne shade in master bathroom and Ivory shade in guest bathroom.</p> <p>vi. Shower for bathing.</p> <p>vii. Decorative mirror with beveled edges and etched lining near border. The size should be compatible with wash basin.</p> <p>viii. 230VAC, 300MM Sweep Wall Bracket Mounted type high speed fan as per Cl. 7.2.1 (S.No. (B) (i), Qty: 01 each lav.</p> <p>ix. Exhaust fan as per Cl. 7.2.1 (S.No. (B) (ii) to drg. No. ICF/SK-7-6-177, Alt. b, 01 no. in Steno room lav. area. <b>However suitable aluminum ducting arrangement similar to LHB Coaches shall be provided from Attendant Room Lavatory to Steno room Lavatory for exhaust of foul air from Attendant room lavatory area.</b></p> <p>x. LED type Mirror light toDrg. No. CC76471 as mentioned at Cl. 7.2.1 (S.No. (A) (2)) suitable for 110VAC/DC shall be provided in each LAV area.</p> <p>xi. LED type Spot Light, 5W: Qty-02 nos. each lavatory to Drg. No. CC76467 as mentioned at Cl. 7.2.1 (S.No. (A) (10)) suitable for 110VAC/DC shall be provided in Lav. area.</p> <p>xii. <b>1.5kW - 2kW</b>, 230V AC, horizontal geyser of 15 liters capacity preferably to cat. no. 15 AL of AO Smith/ AmericanMicronic/ Racold Andris / Venus Magma / V Guard make or equivalent.</p> <p>16A Switch socket shall be provided near the Geyser in Steno room lavatory area.</p> <p>xv 3-Pin Socket for shaving: 01 no. each lav.</p> <p>xiii. One towel rack with coat hook of Continental series of Jaquar make Jaquar/ Kohler/ Roca/Grohe.</p> <p>xiv. Suitable shelf for towel stacking at corner in shower area.</p> <p>xv. Health faucets of allied series of Jaquar/ Kohler/ Roca/Grohe make.</p> <p>xvi. Other bathroom fittings &amp; taps of Continental series of Jaquar/ Kohler/ Roca/Grohe make.</p> <p>xvii. Matching bucket, mug &amp; bath stool (12" high) of reputed make in shower area.</p> <p>xviii. Curtain in shower area with provision of adequate sealing with floor (to avoid any splashing of water from the shower area to rest of the bathroom).</p> <p>xix. Odor control system as per RDSO specification No.: RDSO 2008/CG-11.</p> <p>xx. Napkin Holders</p> <p>xxi. Liquid soap dispenser</p> <p>xxii. Automatic hand sanitizer</p> <p><b>SpecialCondition: Sample/make/modelhastobegotapprovedbytheRCF.</b></p> <p><b>D. Ceiling/Roof Paneling of Master bathroom cum Lavatory, Guest bathroom cum Lavatory, Steno &amp; Attendant bathroom cum Lavatory floor :</b></p> <p>Water proof plywood along with veneer sheets shall be provided for ceiling of Master Bathroom cum Lavatory, Guest bathroom cum Lavatory, Steno bathroom cum Lavatory &amp; Attendant bathroom cum Lavatory. Sizes shall be as per Layout no. RA90030. However, the supplier should get the drawing of Ceiling/Roof Paneling approved before supply from CDE/RCF</p>
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