

**SCHEDULE FOR TECHNICAL REQUIREMENT FOR SUPPLY OF SET OF CUSHIONED SEAT, BERTH, HEAD REST AND FITTING ITEMS ON ACCN COACHES (BG)**

**1.0 FOREWORD**

Coach Rehabilitation Workshop, Bhopal is engaged in carrying out Mid Life Rehabilitation of Indian Railway (Broad Gauge) coaches. The work of rehabilitation involves major corrosion repair to the shell of coach and complete rehabilitation of coach as per existing drawings & specifications of RDSO/ICF. SUPPLY OF SEAT, BERTH, HEAD REST AND FITTING ITEMS WILL BE THE PART OF REHABILITATION OF COACH.

**2.0 SCOPE OF SUPPLY**

The scope covers the technical detail of material, terms & condition and inspection for supply of seat, berth, head rest and fitting items on ACCN coaches at CRWS, Bhopal.

**2.1 SPECIAL CONDITIONS/OPERATING CONDITIONS**

- 2.1.1 The supplier should manufacture the seat, berths, headrest and fitting items at their works/factory premises and supply to CRWS Bhopal.
- 2.1.2 Material manufacturing, supply, transport and unloading at nominated place at CRWS/Bhopal are the whole responsibility of supplier.
- 2.1.3 After unloading the material at nominated place supplier will offer the material for inspection to railway supervisor. Quality, finishing of seat, berths with head rest and fitting items their dimensions will be inspected by railway supervisor. Rejected seat, berth, head rest and fitting items will not be allowed.
- 2.1.4 Firm has to provide work to the entire satisfaction of the railway representative.
- 2.1.5 Firm has to ensure that all fittings are injury free.
- 2.1.6 Agreement has to be given in writing on stamp paper that if there is any customer claim for injury due to material or bad workmanship of supplier then the firm will bear the compensation, if compensation is claimed with in two years after turning out the coach.
- 2.1.7 The material used for manufacturing of seat, berth, head rest and fitting items will be as per latest RDSO specification. Details of Drawing with material given in Clause 2.2.

Prepared by		Checked by	Approved by
J.E. Drawing	SE / Carpentry	SSE/ Carpentry	Asstt. Works Manager (R)
	SE/Furnishing	SSE/Furnishing	

- 2.1.8 The supply should be as per the instruction and to the satisfaction of railway administration. The judgment of quality done by railway officers or his representative will be final.
- 2.1.9 Railway will provide available open/close space for storing of seats, berths, head rest and fitting items supplied by supplier.
- 2.1.10 Supplier will strictly follow the safety rules as per factory act in side the workshop during supply.
- 2.1.11 The supplier shall be responsible for ensuring safety of his staff while supplying seat, berth, head rest and fitting items within the railway premises. In case of accident/causality during supply, the railway will not be responsible for any compensation.
- 2.1.12 The supplier shall not take any advantage of any misinterpretation of the conditions due to typing or any other error and if is in doubt, shall bring it to the notice of the Chief Workshop Manager, CRWS, Bhopal without delay. His decision will be final.
- 2.1.13 The firm at their own cost must replace all rejected material. No payment will be made for such rejected item.
- 2.1.14 No claim whatsoever will be given to the supplier in any circumstances.
- 2.1.15 **The scope of work mentioned in CRWS/BPL/ACCN/cushion mtrl//STR002, ver 04 Dt. 01.08.2010, Para 2.2.1, page 4, note (i) and (ii) to be ensured before bulk supply.**

Prepared by		Checked by	Approved by
J.E. Drawing	SE / Carpentry	SSE/ Carpentry	Asstt. Works Manager (R)
	SE/Furnishing	SSE/Furnishing	

## 2.2 SUPPLY OF SET OF SEAT, BERT, HEAD REST AND FITTING ITEMS OF ACCN COACHES.

2.2.1 **SCOPE OF SUPPLY OF MATERIAL:** - The details of seat, berths, head rest and fitting items required for one ACCN coach is given below. Following material is to be supplied by supplier as a set for one ACCN coach. Details of description, Drg. No. and Qty required is as under:-

S.No.	Description	Drg.No.	Qty per coach
1.	Complete assembled Cushioned Transverse Lower berth of ACCN	RCF DRG NO AE-61442 alt'd', CRWS alt. 'a'.	16 nos.
2.	Complete assembled Cushioned Transverse Middle berth (LH) for ACCN	RCF DRG NO AE- 61444 alt'f '	08 nos
3.	Complete assembled Cushioned Transverse Middle berth (RH) for ACCN	RCF DRG NO AE- 61446 alt'f '	08 nos
4.	Complete assembled Cushioned Transverse Upper berth (LH) for ACCN	CRW/ SK – 822 , alt- nil	08 nos.
5.	Complete assembled Cushioned Transverse Upper berth (RH) for ACCN	CRW/ SK – 822, alt- nil	08 nos.
6.	Complete assembled Cushioned Single seat complete (Turn-over single seat).	RCF DRG NO AE-61451 alt 'd' Note : All studs ( Item no. 4 & 5 of ref.drg. no. AE 61452 alt. nil) required full threaded in Single seat frame .	16 nos.
7.	Complete assembled Cushioned Back rest cum berth (long) for ACCN	RCF DRG NO AE-61453 alt 'c' (Item no. 3 of this drg. should be supply with higher density.)	08 nos
8.	Complete assembled Cushioned Back rest cum berth ( short) for ACCN	RCF DRG NO AE-61455 alt c (Item no. 3 of this drg. should be supply with higher density.)	08 nos
9.	Complete assembled Cushioned Longitudinal upper berth for ACCN	RCF DRG NO AE-61448 alt 'f', CRWS alt. 'a'.	8 nos.
10.	Complete assembled Cushioned attendant's berth with fixing arrangement	RCF Drg no CC61258 alt'a' CC-61240 alt'a', CC-61295, CC61296, CC61297alt'a'	02 nos
11	Head Rest for upper berth	ICF Drg.No.SCN5 -6-1-521alt'j' col. I , The colour shade & pattern of item no. 1 of this drg. shell be as per sample code ALAC-01 or as agreed between the purchaser and supplier.	24 nos
12	Chain assembly for transverse middle berth.	RCF Drg.No. AE 61480, alt'c'	32 nos
13	Total No. of Items in a set		146 Nos

Prepared by		Checked by	Approved by
J.E. Drawing	SE / Carpentry	SSE/ Carpentry	Asstt. Works Manager (R)
	SE/Furnishing	SSE/Furnishing	

**NOTE: -**

- (i) **Effective length and width of Longitudinal upper berth, back rest cum berth (long & short), Transverse upper berth (LH & RH), Transverse middle berth (LH & RH), Transverse lower berth, single seat complete and The distance between stud to stud for transverse berths and single seat in transverse and longitudinal direction are likely to be variable from coach to coach and actual length can be assured after physical verification of measurement on coaches. Hence suppliers are advised to measure actual dimensions coach-wise at CRWS/BPL one month prior to manufacturing of items.**
- (ii) **All studs ( Item no. 4 & 5 of drg. no. AE 61452) required full threaded in Single seat frame . Other dimension of single seat frame will be same as mentioned in drawing no. AE 61452 .**

**2.2.2 IMPORTANT MATERIAL SPECIFICATIONS**

<b>Item/Accessory/ Material/Fitting/ Equipment</b>	<b>Material spec. as mentioned in drawing</b>	<b>Revised Material spec. (On which the material required)</b>	<b>Remarks</b>
(1).Cushioning material in all Seats & Berths has to be Densified Thermal Bonded Polyester block.	PU Foam RDSO- Spec.-C- 9504	As per RDSO Spec. no. CK-607 With amendment slip no. 01& 2 . <b>Note:-</b> 1. Sr. no. 1 &6 of STR clause no. 2.2.1 should be supply with higher density i.e. $60 \pm 3$ .  2. For Sr. no. 7 & 8 of STR clause no. 2.2.1, item on 3 of drg. No. AE 61453 alt. 'c', & item on 3 of drg. No. AE 61455 alt. 'c' should be supplied with higher density respectively.	This revised/upgraded material is to be procured from vendors approved by RDSO and pre inspected by RITES at manufacture's premises.
(2).Vinyl coated fabric	RDSO Spec.C- 9503 Type- II	Spec.no. RDSO/2008/CG-07 for AC coach ,The colour shade & pattern of this mat. shell be as per sample code ALAC-01 or as agreed between the purchaser and supplier.	This revised/upgraded material is to be procured from vendors approved by RDSO and pre inspected by RITES at manufacture's premises.

Prepared by		Checked by	Approved by
J.E. Drawing	SE / Carpentry	SSE/ Carpentry	Asstt. Works Manager (R)
	SE/Furnishing	SSE/Furnishing	

<b>(3).Seat frames &amp; all other items</b>	As per clause 2.2.1 Sr. no. 1 to 12.	As per drawing only.	<b>Note :</b> All studs ( Item no. 4 & 5 of ref.drg. no. AE 61452 alt. nil) required full threaded in Single seat frame only .
<b>(4).Cushioning material for Head Rest</b>	ICF/M/D/S pec.-102 Head Rest (PU Foam blue)	ICF/M/D/Spec.-102 Rev-01 The colour shade & pattern of this mat. Shell be as per sample code ALAC-01 or as agreed between the purchaser and supplier.	This revised/upgraded material is to be procured from vendors approved by RDSO and pre-inspected by RITES at manufacture's premises.

**Note: - 1.** Material for making the seats and berths shall be procured from the approved sources advised by RDSO as valid on date of opening of tender. Suppliers are advised to refer the latest RDSO vendor list for the current approved source of supply.

2. Vendor approvals shall be confirmed on date of inspection of raw material by RITES.

### 2.2.3 **INSPECTION**

Stage inspection from raw material to finished product will be done by M/s RITES at supplier's premises. Inspection certificate should be produced by the supplier at the time of supply.

### 2.2.4 **TERMS & CONDITION OF SUPPLY OF MATERIAL**

2.2.4.1 The supplier will supply finished seat, berths, headrest and fitting items to CRWS/Bhopal.

2.2.4.2 Supply of finished products shall be made in coach sets as specified in scope of supply of Material (See Para.2.2.1).

2.2.4.3 After manufacturing supplier will arrange to transport the seat, berth, head rest and fitting items to CRWS Bhopal at their own cost.

2.2.4.4 Supplier will ensure unloading & stacking of material at the nominated place of workshop at the time of supply.

Prepared by		Checked by	Approved by
J.E. Drawing	SE / Carpentry	SSE/ Carpentry	Asstt. Works Manager (R)
	SE/Furnishing	SSE/Furnishing	

2.2.5 **DELIVERY SCHEDULE**

2.2.5.1 The supplier should supply as per consignee planning of out turn, which will be about 01 to 02 coach set per month. For any change one-month prior information will be given to the supplier. The supplier has to ensure the shade of vinyl-coated fabric from the consignee before one month of manufacturing.

2.2.5.2 Each item will be packed separately in suitable packing.

2.2.6 **WARRANTY**

The warranty is applicable as per IRS condition.

2.2.7 **MARKING**

Manufacturer shall put the name plate on each item-mentioning month & year of manufacturing also.

Prepared by		Checked by	Approved by
J.E. Drawing	SE / Carpentry	SSE/ Carpentry	Asstt. Works Manager (R)
	SE/Furnishing	SSE/Furnishing	