NATIONAL GALLERY OF MODERN ART

NEW DELHI

BID DOCUMENTS FOR

MANUFACTURING, SUPPLY AND INSTALLATION OF COMPOSITE ART STORAGE SYSTEM/UNITS.

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Section: I

National Gallery of Modern Art Jaipur House, New Delhi-110003.

NOTICE INVITING TENDER

Introduction:

The National Gallery of Modern Art (NGMA) came into existence on March 29, 1954 and the gallery is the premier institution of its kind in India with a collection of more than 17,500 works of art and is growing. The NGMA has two branches, one at Mumbai and the other at Bengaluru. NGMA is a repository of the cultural ethos of the country and showcases the changing art forms through the passage of the last hundred and fifty years starting from about 1857 in the field of visual and plastic arts. NGMA organizes special exhibitions at various places within India and abroad at regular intervals. The collections of NGMA include sculptures, paintings, drawings, graphics, photographs etc. The strength of the NGMA collection is its discerning representation of the evolution of Modern Indian Art. Needless to emphasis the necessity of proper care and upkeep of the Art treasures of the Country. NGMA therefore propose to install a state of the art storage system for the safe and secure storage and handling of the art works in its reserve collections

Tendering Process

- The Director, National Gallery of Modern Art (NGMA), New Delhi invites sealed bids under 2 bid system for manufacture, Supply and installing of Composite art storage units / systems in NGMA, Jaipur House, India Gate, New Delhi.
- 3. A pre-bid meeting of the prospective bidders will be organized in the conference room of NGMA on 24.1.2013 at 3.00 p.m. to address any queries/ clarification the bidders wish to make. Bidders may indicate their intention to attend the pre-bid meeting in advance and confirm their attendance via- e-mail (ngma.delhi@gmail.com) or on telephone number 23386111/23388874.
- 4. The tenderers are required to furnish their bids in two separate covers
 - (i) Technical Bid and (ii) Price Bid.

- 5. Technical bids and price bids in the prescribed Performa should be submitted in separate sealed covers superscribing the tender number, bidders name and address etc.
- 6. The price bids of only those tenderers who qualify in the technical bid will be opened for evaluation by the Tender Evaluation Committee.
- 7. Details of time schedule for participation in this tender are given below:-

6.1	Cost of tender document	Rs. 500/-		
6.2	Earnest Money Deposit	Rs. 3.00 Lakhs		
6.3	Last date of Sale of Tender document	21.1.2013 upto 17.00hrs.		
6.4	Date and venue of pre-bid meeting.	24.1.2013 at 15.00 hrs. At conference room, Jaipur House, New Delhi.		
6.5	Las t date of submission of bids.	29.1.2013 upto 15.00 hrs.		
6.6	Date of opening of Technical bids	30.1.2013 at 15.00 hrs.		
6.7	Work Completion period	6 months from the 7 th day of issue of work order		
6.8	Validity period of tender	6 months from the due date of submission of the tender		

8. Tender documents can be obtained in person from the Office of the Administrative Officer, NGMA, Administrative Block, New Wing, Jaipur House New Delhi on Payment of Rs. 500/- by Bank Draft/Pay order or by cash or can be down loaded from the web-portal www.eprocure.gov.in or ngmaindia.gov.in. In the case of downloaded tender documents, the cost of tender documents shall have to be paid by bank draft along with the bids.

Section - II

General Terms & Conditions of Contract

Section: II

GENERAL TERMS & CONDITION OF CONTRACT

- The tenderer should be an established Agency / Firm dealing with the categories of works published in the Tender Notice of having infrastructural facilities including manpower. The agency must have a local office at Delhi, with a regular telephone office and other communication facilities.
- 2. The incomplete or conditional tenders would not be accepted and are liable to be rejected.
- 3. Bids received by the NGMA after the specified date and time will not be considered.
- Tenders not conforming to the requirements mentioned in the Tender Form will be rejected and no correspondence shall be entertained in this regard.
- The tender form should be clearly filled in ink legibly or typed. The Tenderer should quote the number, rates and amount tendered by him / them in figures as well as in words. Alternations, if any in the tender should be attested properly by the tenderer failing which the tender is liable to be rejected. Attested copies of the Registration Number for the firm along with TIN No. allotted by the sale Tax authority PAN No. and Service Tax No. allotted by the Income Tax / Customer Department and copy of the last Income Tax Clearance Certificate, Satisfactory Performance Certificate issued by the concerned agency (s) organizations where such type of works / jobs have been performed by the tenderer earlier shall also be enclosed.
- 6. The tenderer should take care that the rate and amount should be written in such a way the interpolation is not possible. No column should be left blank which would otherwise make the tender for rejection.
- 7. False information / documents provided for consideration would result in disqualification of the bidder.

- Forwarding letter should clearly indicate the list of enclosures. Every paper of the tender should be signed by the tenderer with seal of Agency / Firm.
- 9. The tenderer / Agency/ Firm shall not sublet the work' to other Tenderer / Agency / Firm after the award of the work.
- The National Gallery of Modern Art will deduct Income Tax at source under Section 194-C of the Income Tax Act, 1961 as applicable from the tenderer.
- 11. The tender shall be accompanied by Earnest Money Deposit of Rs. 3.00 Lakhs (Rupees: Three Lakhs Only) as stipulated in the tender. The tender not accompanied with EMD shall be treated as invalid. The E.M.D. and Tender Document Cost shall be submitted in the form of Demand Drafts issued by any Nationalised / Scheduled Bank having its branch in New Delhi drawn in favour of Director, National Gallery of Modern Art, New Delhi.
- 12. Bidders whose technical bid is found to be acceptable and meeting the eligibility requirements as specified will be informed about the date and time of the opening of the price bid. The technical bids will be evaluated to shortlist the eligible bidders.
- 13. NGMA will open price bids of only the technically short listed bids, in the presence of the bidder or their authorized representative who choose to attend the bid opening, at the time and date to be informed later.
- 14. The bidder's authorized representative may attend the bid opening and shall sign an attendance register as a proof of having attended the bid opening. The bidder name, bid prices, discounts and such other details considered as appropriate by NGMA will be announced at the time of opening of the price bids.
- Technical Bids received against the tender will be evaluated by the Tender Evaluation Committee (TEC) for technical suitability and will be shortlisted.
- Short listed bids shall be considered for commercial evaluation of price bids.

- 17. NGMA shall award the contract to the eligible bidder whose technical bid has been accepted and determined as the lowest evaluated price bid.
- 18. The bidder shall quote for all products mentioned in the tender document. Part bidding is not acceptable.
- 19. Should the amount put in words differs from the amount put in figure, or if there is an arithmetical error, the lesser amount shall be taken unless the difference is attributable to an obvious error, whereupon the correct amount shall be taken.
- 20. If more than one bidders quotes same lowest price, NGMA reserves the right to award the contract at its own discretion.
- 21. NGMA reserves the right to accept or reject any or all bids without assigning any reason whatsoever.
- 22. NGMA reserves the right to increase or decrease the scope of supplies indicated in the bid documents after the award of the tender and payment shall be made on pro-rate basis. NGMA reserves the right to cancel/short close/extend the order at any given point of time due to Force Majeure or directions from the Government of India.
- 23. NGMA reserves the right to cancel / short close the order due to non-satisfactory performance by any of the service / supply offered. Cost / damages arising out of such cancellation / short closure shall have to be borne by the bidder.
- 24. NGMA requires that the bidders who wish to bid for this project have highest standards of ethics. NGMA will reject a bid if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices while competing for this contract.
- 25. Interpretation of the clauses in the Tender Document / Contract Document in case of any ambiguity / dispute in the interpretation of any of the clauses in this Tender Document, NGMA's interpretation of that clauses shall be final and binding an all parties.
- 26. The Bidders must ensure that the conditions laid down for submission of offers detailed in the preceding paras, are completely and correctly fulfilled. The submission of any offer connected with these supplies and documents shall constitute an agreement than the Bidder shall

have no cause of action or claim, against NGMA for rejecting the offer. NGMA shall always be at liberty to reject or accept any offer or offers at its sole discretion.

- 27. Offers shall be deemed to be under consideration immediately after they are opened and until such time the official intimation of award of contract is made by NGMA to the bidder. While the offers are under consideration, Bidders and or their representatives or other interested parties are advised to remain from contacting NGMA by any means. If necessary, NGMA will obtain clarifications on the offers by requesting for such information from any or all the Bidders, only in writing. Bidders will not be permitted to change the conditions and offers once their bids have been opened.
- 28. Any individual (s) signing the tender and related documents should be a competent authorized person and original copy of power of authorization issued by the competent authority should accompany the tender.

Section – III

Special Condition of Contract

Section: III

SPECIAL CONDITIONS OF CONTRACT

- Offers shall be as per the Instructions to Bidders and Terms & Conditions of contract in bid documents. However the Bidder shall indicate his acceptance or otherwise against each of clause and sub clauses of the Instruction to Bidder and Terms & Condition of contract. For this purpose, the Bidder shall enclose a separate statement as per format Indicating only the deviations from any clause or sub clause of the specifications or Terms & Conditions of contract which Bidder proposes with justification for each deviation. NGMA however reserves the right to accept or reject these deviations and decision there on shall be final and binding.
- The Tender Evaluation Committee (TEC) or a designated team of experts may visit the premises of the bidder for inspection of the manufacturing facilities available before finalizing the evaluation of the technical bids. Only those bidders who have adequate manufacturing facilities will be considered for opening of price bid.
- 3. The bidder shall facilitate client's inspection of the facilities at the bidder's factory premises. As and when considered necessary, the successful bidder will also facilitate inspection of the manufactured units at their facilities before despatch of the consignment.
- 4. In the event of tenderer withdrawing his tender before the expiry of tender validity period of 6 Months from the date of opening, the tender shall be cancelled and EMD shall be forfeited.
- 5. The Earnest Money Deposit of unsuccessful Tenderers shall be returned without interest as early as possible on award of Contract to the successful Tenderer. The Earnest Money Deposit of the Successful Tenderer shall be refunded after the successful completion of work or shall be adjusted against the performance Guarantee to be furnished in the form of Bank Draft or Bank Guarantee.

- 6. Applicable Taxes and duties such as VAT, Service Tax, WCT etc. for the proposed work shall be mentioned separately. The statutory Taxes will be paid on production of documentary evidences. The rates quoted shall be FIRM and NOT subject to any variation due to taxation of Central or State Government. The Employer shall not provide any concessional "C" or "D" Form.
- 7. Comparison and Evaluation of Price Bids will be based on the Grand Total of systems quoted by the Tenderers as per price bid.
- 8. Income Tax and Works Contract Tax will be effected for recovery at the rates as from the gross amount of the work contract bills as per the relevant provisions of the Income Tax Act.
- 9. Security deposit at 10% of Contract amount shall be furnished by the successful tenderer in the form of Bank Draft or Bank Guarantee favouring Director, NGMA New Delhi and payment against the tenderers bills shall be made only after the requisite Security deposit is furnished by the tenderer.
- 10. The security deposit will be refunded after the expiry of warranty period without interest less deduction of any sum that may be due from the Tenderer after Completion of the work.
- 11. The tenderers should quote their rates in figures as well as in words the amount tendered by them. The amount per each item should be worked out and requisite total should be given. All rates shall be quoted in proper form in the tender schedule enclosed. The rates quoted should be valid for 6 months from the due date of submission of tender.
- 12. Please note that no advance payment will be made. Full payment will be made within 30 days after the satisfactory completion of work in all respect. However part payments for the work already completed in all respects may be considered at the discretion of NGMA subject of production of performance Guarantee.

- 13. The Tenderer may visit the work site and get acquainted himself with the site conditions, nature of work involved before tendering. Any assistance, in this regard will be provided by the department under prior appointment and the undersigned may be contracted for the purpose.
- 14. The materials to be used for the work should conform to the specifications and applicable standards. All materials to be used should be got approved by the Director, NGMA in the first instance.
- 15. The Tenderer shall be responsible for making good of all damages done during the work and has to employ skilled & competent workers for carrying out the work.
- 16. The Tenderer shall be responsible for taking precautionary measures for the safety of the workman engaged for installation of the system at site and the responsibility for payment of compensation etc. lies entirely on the part of the Contractor.
- 17. The acceptance or otherwise of the tender will rest with competent authority of NGMA who does not bind himself to accept the lowest tender and reserves to himself the authority to reject any or all of the tenders received without assigning any reason.
- 18. No tools, plant, labour, equipment, transport, etc., required for the work will be supplied departmentally and contractor has to make his own arrangements.
- 19. The work shall be completed within 6 months from the 7th day of award of work to the successful tenderer.
- 20. The time for completion of work should be adhered strictly and in any event of failure to complete the work in time or by expiry of any period of extension granted, the Tenderer shall pay as compensation by way of penalty @0.4% per day on the tendered value of the work which remains unfinished subject to a maximum of 10% of the total contract / executed value irrespective of any kind of reason put forth by the Tenderer, except on account of delay at the instance of the NGMA or due to natural

calamities. The NGMA shall have powers to deduct this amount from the payment/deduction of such compensation shall not relieve, the contractor from the obligation to complete the work or from any other obligations and liabilities under the contract and shall be entitled to carry out the work through other agencies on the account and risk of the contractor making the contractor liable for loss or damage which the NGMA may sustain by reason of such failure on the part of the contractor.

- 21. The Tenderer shall clearly mention the time required for completion of the work if any deviation to the specified completion period is considered necessary.
- 22. The firm quoting for the work should have the experience of undertaking similar work or identical specialised storage system and has a turnover of at least Rs. 6.00 crores during the last 3 years.
- 23. Only these tenderers who have adequate manufacturing facility to produce specialised storage system on their own shall be considered for award of work.
- 24. Warrantee: The items supplied by the Contractor shall carry warrantee a period of 3 Years from the date of commissioning of the system. In the event of failure during the warrantee Period, the restoration work shall be done free of cost by the Contractor within 24 Hours of giving notice or else the expenditure incurred by NGMA to re-work will be recovered from the performance guarantee/Security deposit amount with the NGMA. During the warrantee period the contractor shall also be required to undertake any work related to shifting, modifications and expendability of the composite Art storage system.
- 25. <u>Arbitration:</u> Disputes, if any, arising out of manufacture supply installation and warrantee etc. if not naturally settled shall be referred to the sole Arbitrator who may be appointed with the consent of the both parties in accordance with the provisions contained in Arbitration and Conciliation Act, 1996 and the rules thereunder and any statutory modifications for the time being in force shall be deemed to apply to the arbitration proceeding under this clause. The venue of the arbitration shall be Delhi in India. The award will be binding upon the parties.

26. Force Majeure:- NGMA may consider relaxing the penalty and delivery requirements, as specified in this document, if and to the extent that, the delay in performance or other failure to perform its obligations under the Contract is the result of a Force Majeure, Force Majeure is defined as an event of effect that cannot reasonably be anticipated such as acts of God (like earthquake, floods, storms etc.), acts of states the direct and Indirect consequences of wars (declared or undeclared), hostilities, national emergencies, civil commotion and strikes at successful Bidder's premises.

Either party shall be excused from performance of their obligation during or to the extent that performance is prevented by the occurrence of unforeseen causes beyond the control of and without the negligence of the party claiming excuse. Such causes shall include, without limitation, strike, go slow, other concerted acts of workmen, lockout, Act of God, war, fire, explosion, action of elements, flood, epidemic, riot, sabotage, embargo, blockade, civil disturbance and Governmental restrictions or limitations etc. The party claiming excuse shall give immediate written notice thereof to the other, in any case not later 15 (fifteen) days, following the occurrence of such event. If performance is held for a continuous period of more than 3 (three) months from the date of first notice, then the parties shall review the situation and agree upon any course of action so as to protect the interest of both.

Section - IV

General Specifications, Drawings and Adherence needs

Special Testing Facilities required at suppliers manufacturing unit:

SI.No	Testing Need	Facility needed	Expected Test Outcome	
01	Mechanical Properties of Steel	a) Universal testing Machineb) Hardness Tests		
02	Structural Test on load bearing members	Fully Equipped structural lab with, a) Compressing testing facility up to 60 Tons, 3m clear height. b) Joint stiffness test for beam-column joints. c) Fatigue Test facility for Joints.	a) Compression test on columns. b) Moment – Rotation characteristics of beam-column.	
03	Functional test on storage units	Dedicated prototyping & testing lab with min. area of 500 sq.m.	Functional test on installed storage unit.	
04	Test on Powder Coating	Gloss Meter	Gloss @ 60°	
		DFT Meter	powder coating thickness (Avg)	
		Cross Hatch Tester with Adhesive tape	Adhesion	
		Using Ethyl Methyl Ketone	Cure test	
		Impact Tester (on Sample)	Impact resistance	
		2H Pencil	Pencil hardness	
		Conical Mandrel - 6mm dia (on Sample)	Conical mandrel (6mm)	
		Salt bath in 5% NaCl salt solution for 500hrs	Corrosion Resistance under Salt Spray	

Technical Specification for Arts Storage.

Manufacturing, Supplying and Installing in position Composite Art Storage units comprising of
8-pull out panels block 'A1-TYPE' (Single Aisle) having overall size including operating aisle of '7500'mm and as per details given below

Quantity: '2' A1 nos. (details as per Drgs no attached herewith)

UOM: One Block as per dimensions given and as description given above.

A1-TYPE | Height : 3600 | Width : 3100 | Depth : 3750

Manufacturing, Supplying and Installing in position Composite Art Storage units comprising of '16' pull out panels (Common Aisle) A2-Type per block within a frame assembly with module covers, top guiding assembly and trolley assembly together with accessories having overall size including operating aisle of '11250'mm as follows

Quantity: '1' A2 no. (details as per Drgs no attached herewith)

UOM: One Block as per dimensions given and as description given above.

A2 - TYPE Height : 3600 Width : 3100 Depth : 3750

Specifications for Type A1 & A2

1.0 Frame-Assembly

Frame assembly comprises of:

- 1.1 Frame Upright (1): Frame upright shall be of Roll formed construction of section size minimum '80' mm wide x '80' mm deep x '1.6' mm thick made in single piece without welding. It shall have minimum of 8 bends with holes / slots at every '50' mm for flexibility. The manufacturing process of punching and forming is in one flow and a synchronized operation, thereby providing dimensional accuracy and contour uniformity.
- 1.2 Bracings (2): Diagonal and Horizontal bracing channels are used to join uprights to make frames. The bracing channels shall be of lipped 'C' profile of section size '30' mm x '30' mm x '6' mm lip x '1.6' mm thick. The channel shall be of single piece Roll formed construction.
- 1.3 Base Plate (3): Stopper shall be made from Mild steel rod of minimum '8'mm diameter and bent in the form of 'C' to give the adequate strength. Base plate shall grout to the floor, to distribute the load to ground, using '2' numbers of expansion bolts.
- 1.4 Stability tie rods (4): Top of the frames shall be provided stability by means of '3' pairs of tie rods for '8' pullout panels unit & '6' pairs of tie rods for '16' pullout panels unit of minimum '9'mm diameter with standard turn buckle adjustment.
- 1.5 Rear Stability Beams (5): Rear end of the frames shall be stabilized using stability beams. Beams shall be of box type construction, made of two 'C'-section, through crimping technology. The Beam section shall be minimum '75' mm x '50' mm x '1.6' mm thick. No welding is to be done throughout the beam length and only the beam ends are welded to the end connectors.

The end connectors shall be of minimum '3.5'mm thickness with minimum '3' holes for bolting. The beams are bolted on to the vertical uprights through end connectors.

1.6 Top horizontal Beam (6): A top horizontal beam shall be provided to connect the extreme end of the frames to provide support for the guiding uprights (7). Beams shall be of box type construction, made of two C-sections, through crimping technology. The Beam section shall be minimum '75' mm x '50' mm x '1.6' mm thick. No welding is to be done throughout the beam length and only the beam ends are welded to the end connectors. The end connectors shall be of minimum '3.5'mm thickness with minimum '3' holes for bolting. The beams are bolted on to the vertical uprights through end connectors.

The beams shall be welded with Roll formed angle section of '2.5' mm to enable fitment of the guiding upright (7). The beams are bolted on to the vertical uprights between the frames, perpendicular to the movement of trolleys.

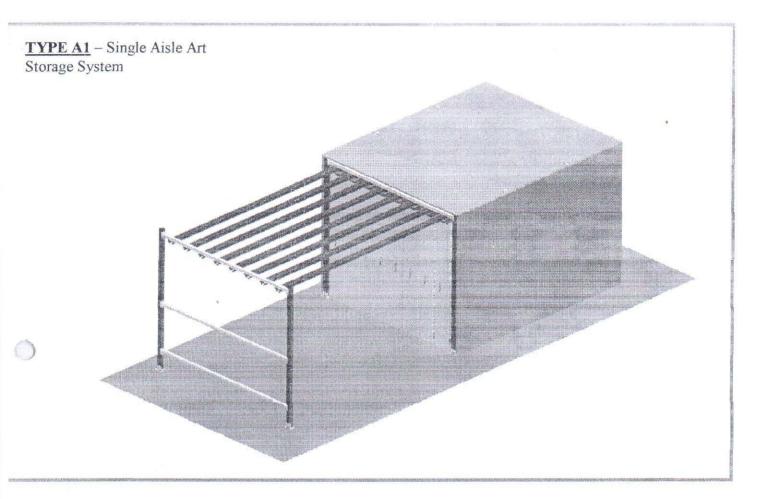
- 1.7 Guiding Upright (7): Guiding Upright shall be of Roll formed construction of section size minimum '110' mm wide x '90' mm deep x '1.8' mm thick made in single piece without welding. It shall have minimum '12' bends with holes / slots at every '50' mm for flexibility. The manufacturing process of punching and forming is in one flow and a synchronized operation, thereby providing dimensional accuracy and contour uniformity.
- 1.8 Stopper (8): Stoppers shall be provided in the front and rear of the frame to arrest movement of trolley beyond desired point. Front stopper is to be provided to ensure that trolley will not come out of the frame totally. Rear stopper is to be provided to ensure that the trolley does not hit the rear stability beam and the trolley front cover aligns with the face of the front frame upright.
- 1.9 Module cover (9): Module cover comprises of panels forming an enclosure at top, back and both extreme sides of the art storage unit. Each panel shall be of minimum '6' bend construction and roll formed for the entire height without welding / other joints. The panels shall be of maximum '300' mm width and of '0.8' mm thick.

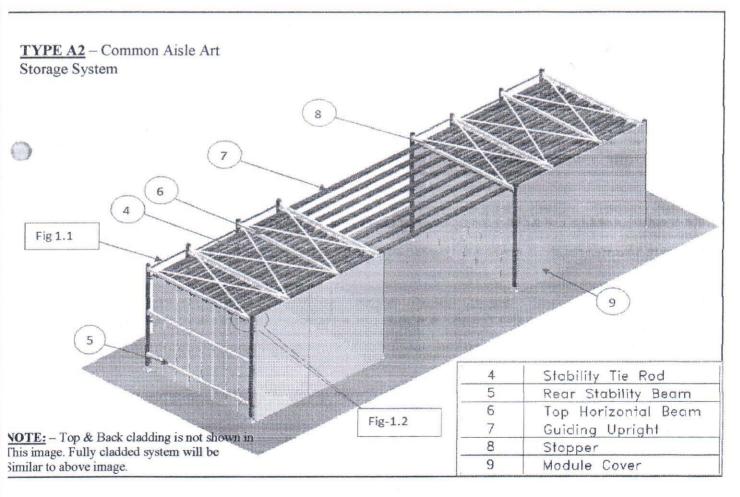
2. Understructure assembly:

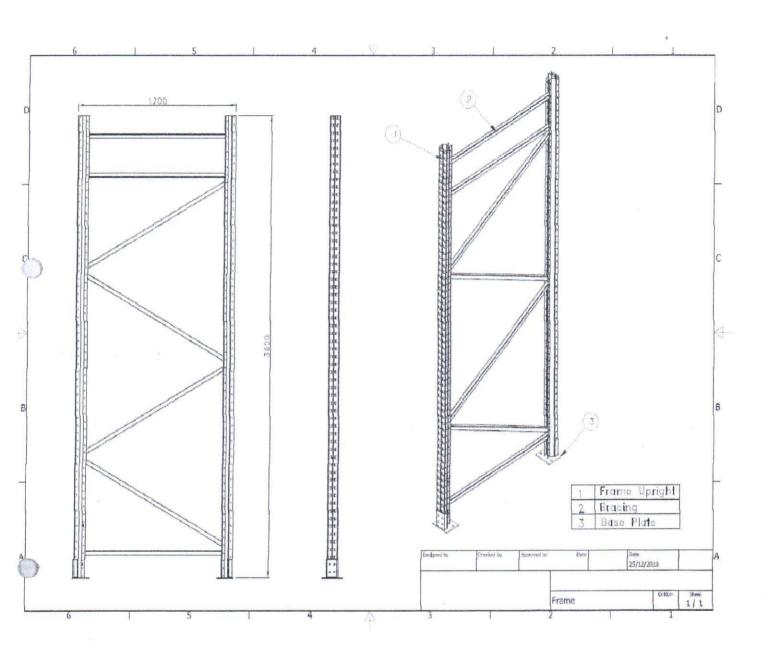
Understructure holds the trolley and bottom wheel assembly, it comprises of,

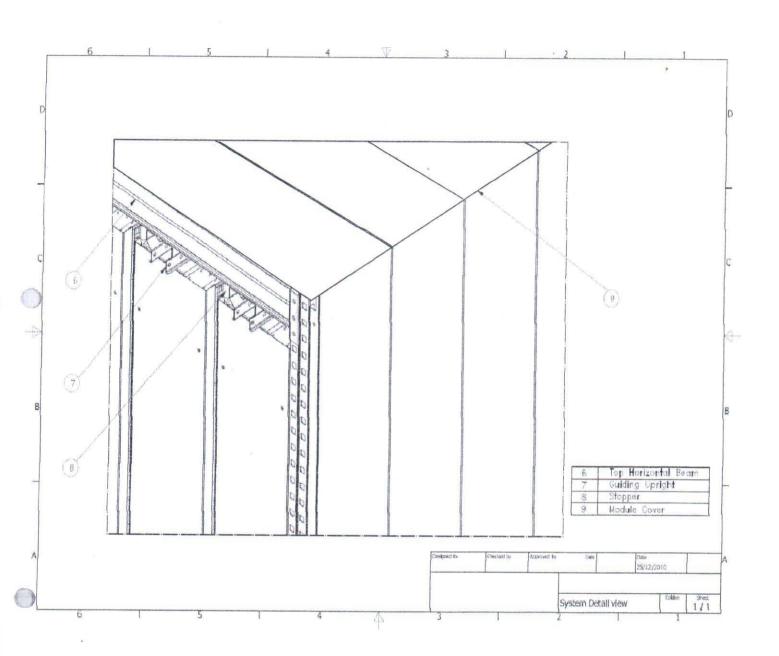
2.1 Undercarriage (10): Undercarriage made up of roll formed construction of section size minimum '110'mm wide x '90' mm deep made in single piece without welding. The thickness of the section shall be of '2.5' mm. Undercarriage section shall have minimum '12' bends with holes / slots at every '50' mm for flexibility. The manufacturing process of punching and forming is in one flow and a synchronized operation, thereby providing dimensional accuracy and contour uniformity.

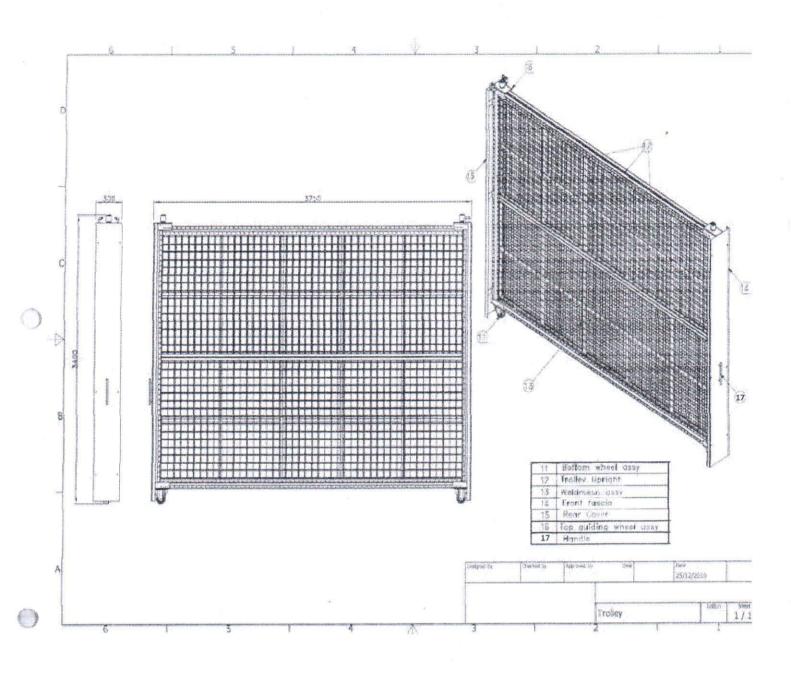
	2.2 Bottom wheel assembly (11): Two castor wheels per undercarriage, one at each end shall be provided. Castor wheels shall be of '100' mm outer diameter and '12' mm inner diameter. Castor wheels shall have in-built high quality, self lubricated, sealed antifriction bearings of SKF make or equivalent. Wheel material shall be of engineering plastic/ polymer / Neoprene of Rexello make or equivalent.
3. Superstructure assembly:	Superstructure houses the paintings and facilitates retrieval of paintings by enabling "Pull-out". & it comprises of:
	3.1 Trolley upright (12): Trolley Uprights shall be of Roll formed construction of section size minimum '110' mm wide x '90' mm deep made in single piece without welding. The other three enclosing uprights of the frame shall be of '1.8' mm thick. The trolley uprights shall have minimum '12' bends with holes / slots at every '50' mm for flexibility. The manufacturing process of punching and forming is in one flow and a synchronized operation, thereby providing dimensional accuracy and contour uniformity. 3.2 Weld mesh assembly (13): Each trolley comprises of two weld mesh frame assemblies. Each weld mesh frame assembly shall be made of rigid tubular frame of welded construction and have weld mesh welded on both sides. Tube shall be of size '30'mm x '30'mm x '1.6' thick. The weld mesh shall be with '75' mm x '75' mm grid with a wire diameter of '5'mm. 3.3 Front fascia (14) & Rear Cover (15): Each Trolley shall be provided with a front fascia and a rear cover. The front fascia and rear cover shall be of minimum '4' bend construction with a section of '300' mm x '40' mm and thickness '1.25' mm. 3.4 Top guiding wheel assembly (16): Each trolley shall be provided with minimum two nylon guiding wheels, one at each end on the top side of the trolley. Wheels shall roll smoothly on high quality, self lubricated, sealed antifriction bearings, 61906 ZZ of SKF make or equivalent. Wheels shall be of minimum '60' mm diameter. 3.5 Handle (17): A stainless steel (SS304) handle of minimum '250' mm length shall be fitted to the front cover to facilitate pull out of the trolley. Position of handle shall be at a height of around 1200mm from ground.
4. Accessories:	Label Holder: A label holder to suit 'A5' size paper insertion shall be provided on the front cover. The label holder shall be of suitable acrylic material to enable reading the inserted label. Clamp: Clamps shall be provided as per drawing no. 18. Minimum '60' clamps shall be provided per trolley (Average of '5' clamps per painting x '12' paintings per trolley) Straps: Straps shall be provided to secure the paintings to weld mesh. The strap shall be of flexible polymer of minimum width '50'mm. The strap shall have length adjustment feature with buckle or
All the above items a	lock to enable fixing of different sizes of paintings. re bolted at site together to make the trolley assembly.

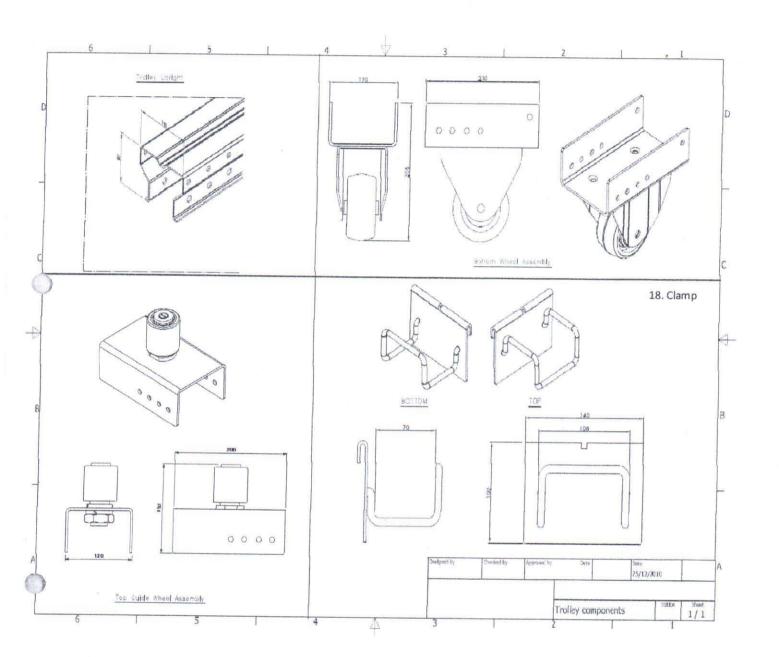












Fabricating, Supplying and Erecting in position, Composite Art Storage units comprising '8' pull out trolleys within a frame assembly with module covers, rail assembly, top guiding assembly and trolley assembly together with accessories having overall size including operating aisle of '7200'mm as follows:

Quantity: '32' B nos (details as per Drgs no attached herewith)

UOM: Block as per description below

B-TYPE | Height : 2134 | Width : 3100 | Depth : 3750

Fabricating, Supplying and Erecting in position, Composite Art Storage units comprising '8' pull out trolleys within a frame assembly with module covers, rail assembly, top guiding assembly and trolley assembly together with accessories having overall size including operating aisle of '6400'mm as follows:

Quantity: '2' C nos (details as per Drgs no attached herewith)

UOM: One Block as per dimensions given and as description given above.

C-TYPE Height: 2134

Width: 3100

Depth : 3350

Fabricating, Supplying and Erecting in position, Composite Art Storage units comprising '6' pull out trolleys within a frame assembly with module covers, rail assembly, top guiding assembly and trolley assembly together with accessories having overall size including operating aisle of '6800'mm as follows:

Quantity: '3' D nos (details as per Drgs no attached herewith)

UOM: One Block as per dimensions given and as description given above.

D-TYPE Height: 2134

Width: 2325

Depth: 3550

Fabricating, Supplying and Erecting in position, Composite Art Storage units comprising a block of '6' pull out panels per block (Single Aisle) within a frame assembly with module covers, top guiding assembly and trolley assembly together with accessories having overall size including operating aisle of '7200' mm as follows

Quantity: '1' E no. (details as per Drgs no attached herewith)

UOM: One Block as per dimensions given and as description given above.

E-TYPE

Height: 2134

Width: 2325

Depth: 3750

Specifications for Type B, C, D & E

1.0 Frame-Assembly

Frame assembly comprises of:

1.1 Frame Upright (1):

Frame upright shall be of Roll formed construction of section size minimum '55' mm wide x '45' mm deep x '1.6' mm thick made in single piece without welding. It shall have minimum '6' bends with holes / slots at every '50' mm for flexibility. The manufacturing process of punching and forming is in one flow and a synchronized operation, thereby providing dimensional accuracy and contour uniformity.

1.2 Bracings (2):

Diagonal and Horizontal bracing channels are used to join uprights to make frames. The bracing channels shall be of lipped 'C' profile of section size '25' mm x '20' mm x '6' mm lip x '1.6' mm thick. The channel shall be of single piece Roll formed construction.

1.3 Base plate (3):

It shall be provided to transform the load to ground. Base-plate shall grouted to the floor by using min '2' no of expansion bolts.

1.4 Row connector (4):

Row connectors are used to connect two frames. The row connector channels shall be of lipped 'C'profile of section size '30' mm x '30' mm x '6' mm lip x '1.6' mm thick. The channel shall be of single piece Roll formed construction.

1.5 Stability tie rods (5):

Top of the frames shall be provided stability by means of '3' pairs of Tie rods with standard turn buckle adjustment.

1.6 Rear Stability Beams (6):

Rear end of the frames shall be stabilized using stability beams. Beams shall be of box type construction, made of two C-sections, through crimping technology. The Beam section shall be minimum '75' mm x '50' mm x '1.6' mm thick. No welding is to be done throughout the beam length and only the beam ends are welded to the end connectors. The beams are bolted on to the vertical uprights through end connectors.

1.7 Top horizontal Beam (7):

A top horizontal beam shall be provided to connect the extreme end of the frames to provide support for the guiding channels (8). Beams shall be of box type construction, made of two C-sections, through crimping technology. The Beam section shall be minimum '75' mm x '50' mm x '1.6' mm thick. No welding is to be done throughout the beam length and only the beam ends are welded to the end connectors. The beams are bolted on to the vertical uprights through end connectors.

The beams are bolted on to the vertical uprights between the frames, as shown in the drawing.

1.8 Guide Channel (8):

Guiding channel shall be of formed construction of section size minimum '50' mm wide x '30' mm deep x '1.6' mm thick. It shall have holes to fix the Top horizontal Beam. '2' sets of bearings of size 6404-2Z of SKF make or equivalent will be fixed to Guide channel for providing stability and guidance to the trolley on retrieval.

1.9 Module cover (9):

Module cover comprises of panels forming an enclosure at top, back and both extreme sides of the art storage unit. Each panel shall be of minimum '6' bend construction and roll formed for the entire height. The panels shall be of maximum '300' mm width and of '0.8' mm thick

2. Understructure assembly:

2.1 Under carriage (10):

Shall be capable of taking load of max 240 kg (Excluding dead weight of the system) with deflection with in span/300. Frame shall be of welded construction with formed steel of '3.15' thk which makes a rigid structure. Height of the Understructure section shall be of '90'mm.

2.2 Flanged Wheel Assembly (11):

Each trolley assembly shall consist of '2' no's of Flanged wheel assemblies. Each flanged wheel assembly consists of Precision machined mild steel shaft of Diameter '20'mm and '2' no's of precision machined mild steel wheel of diameter '56'mm and shall have a flange of diameter '75'mm.

Flanged wheel assembly shall be mounted to under carriage with '2' no's of flange bearings per wheel. Flange bearing shall have a bearing 6004 2Z SKF or equivalent housed in a formed sheet metal. Flanged wheel assemblies shall be fixed on the rear side of under carriage.

2.3 Flat wheels (12):

Each trolley assembly shall be provided with '1'no of Flat wheel assembly. Each flat wheel assembly consists of one Precision machined mild steel shaft of Diameter '20'mm and '2'no's of castor wheels made of engineering plastic / polymer / Neoprene of Rexello make or equivalent. Wheel shall be of diameter '100'mm.

Flat wheel assembly shall be mounted to under carriage with '2' no's of flange bearings per wheel. Flange bearing shall have a bearing 6004 2Z SKF or equivalent housed in a formed sheet metal. Flat wheel assembly shall be fixed on the front side of under carriage. Flat wheel assembly shall also consists of '2' no's of Flanged bush Precision machined and mounted to under structure.

2.4 Rail (13):

Rails shall be made of mild steel bright bar welded on a sheet metal strip designed for ensuring guidance and smooth, effortless, movement of the pull out trolley assembly. Rails shall be anchored on the floor and grouted.

'2' rails per pull out trolley assembly shall be provided to ensure smooth movement & smooth transfer of load with in the block. The rail shall be made up of '19'mm bright (zinc plated) square bars mounted on a plate. End Stoppers shall be provided to prevent derailment.

3. Superstructure assembly:

3.1 Super structure (14):

Superstructure shall be made of '3' rigid Frame assemblies. Each frame assembly is made up of ERW tubes that are connected by formed sections. '2' Frame assemblies stand vertically over under carriage and shall be fixed using bolts. Vertical frame assemblies shall be interconnected horizontally with third frame assembly so as to make a closed frame.

3.2 Weld mesh frame assembly (15):

Super structure shall consist of minimum of '2' no of weld mesh frame assembly. Each weld mesh frame assembly shall be made up of a rigid welded tubular frame and weld mesh. Weld mesh shall be welded to tubular frame. Tubular frame shall be made of '30'mm square and '1.6'mm thick. Weld mesh wire shall be of '5'mm diameter and welded in a grid of '75'mm square.

3.3 Front fascia (16), Top cover (17), Rear cover (18):

Each Trolley shall be provided with a front fascia, top & rear covers. The front fascia, top & rear cover shall be bolted to the trolley assembly. Front fascia, top & rear cover shall be of minimum '4' bend construction with a section of '300' mm x '40' mm and thickness '1.25' mm.

3.4 Handle (19):

A handle of minimum '250' mm length shall be fitted to the front cover to facilitate pull out of the trolley. Handle shall be of stainless steel material (SS 304). Position of handle shall be at a height of '1200'mm from ground..

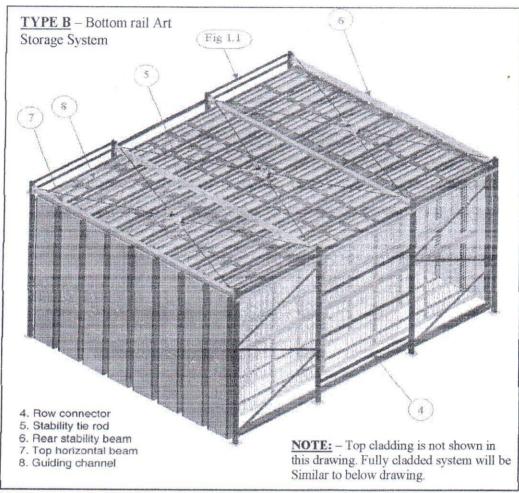
4. Accessories:

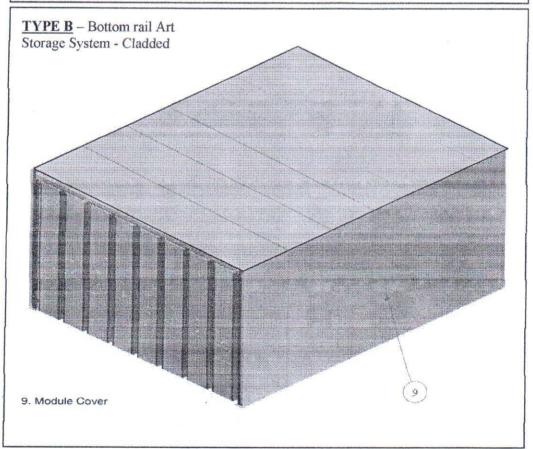
<u>Label Holder:</u> A label holder to suit 'A5' size paper insertion shall be provided on the front cover. The label holder shall be of suitable acrylic material to enable reading the inserted label.

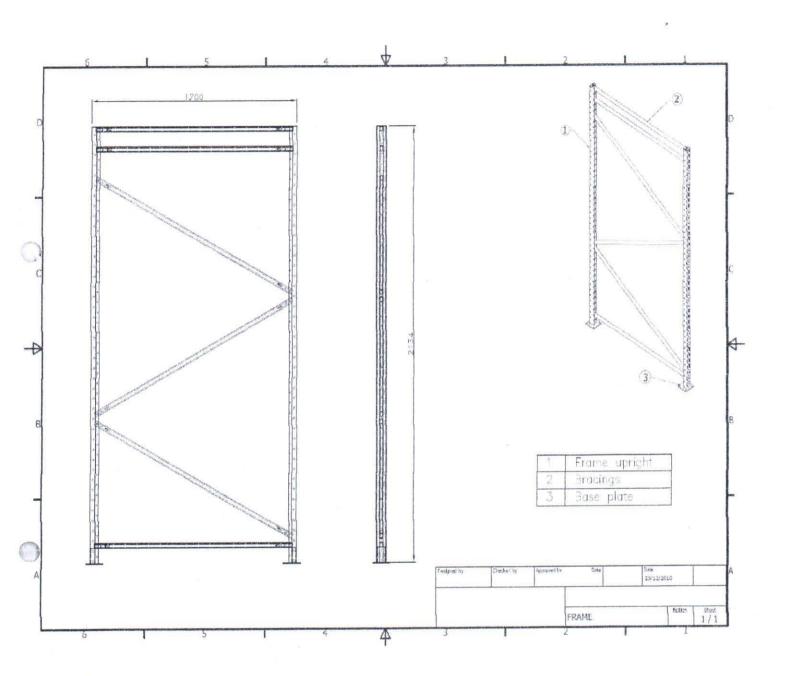
Clamp: Clamps shall be provided as per drawing no. 20. Minimum '60' clamps shall be provided per trolley (Average of '5' clamps per painting x '12' paintings per trolley)

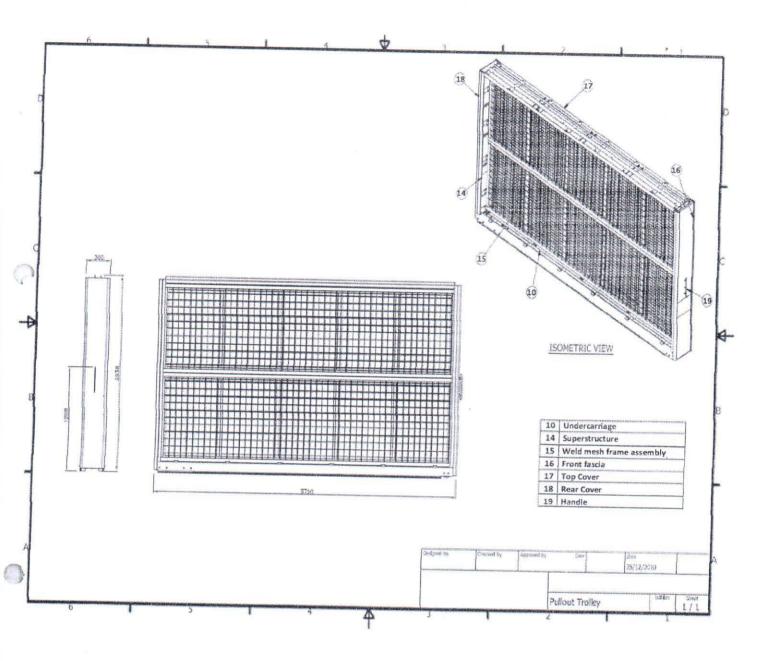
<u>Straps</u>: Straps shall be provided to secure the paintings to weld mesh. The strap shall be of flexible polymer of minimum width '50'mm. The strap shall have length adjustment feature with buckle or lock to enable fixing of different sizes of paintings.

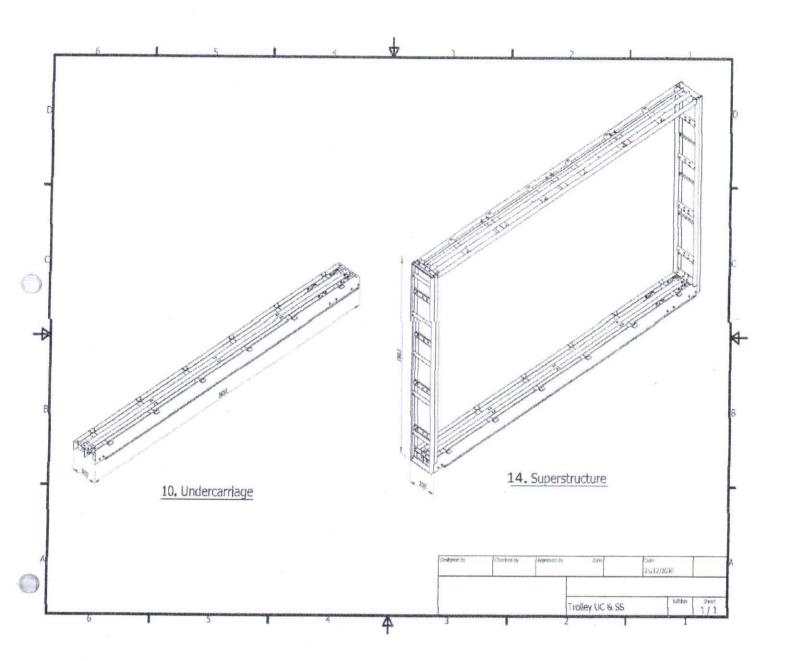
All the above items are **bolted at site** together to make the trolley assembly.

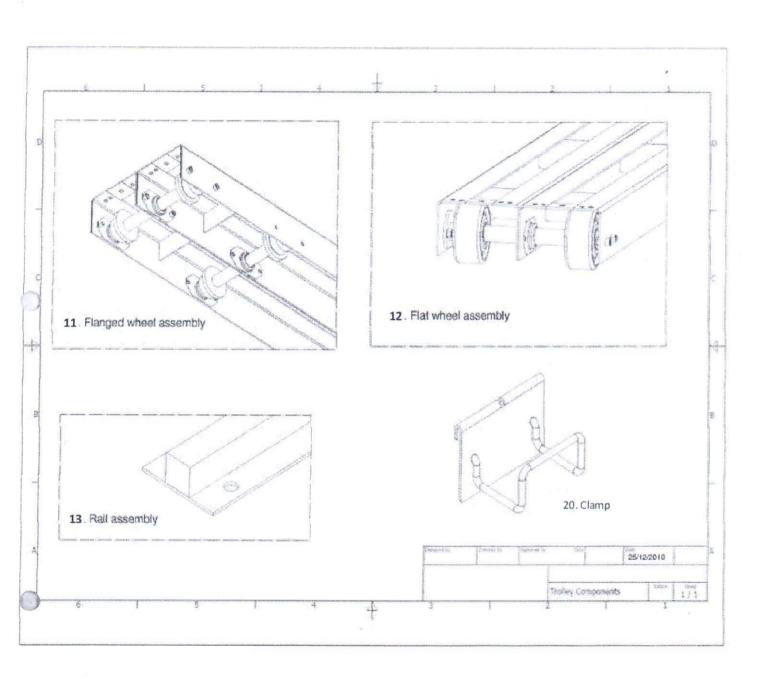






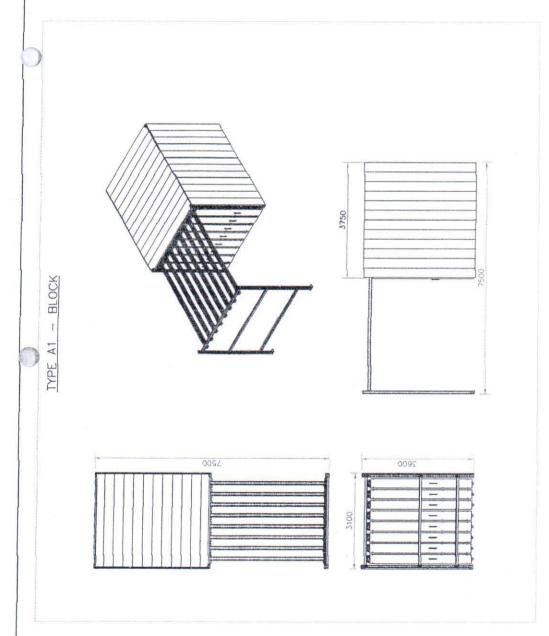




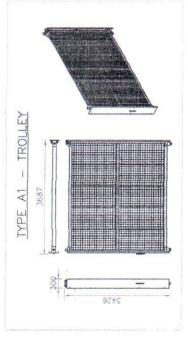


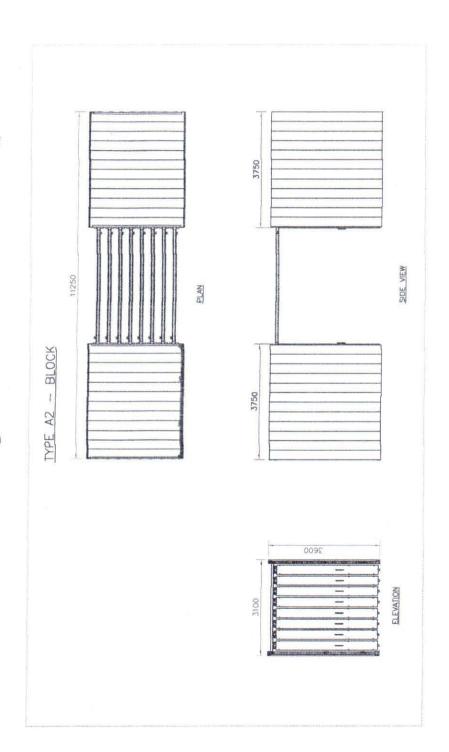
General Specifications and adherence needs

Raw Material:	 All upright members shall be made of Hot rolled steel sheet equivalent to IS 2062, E350 with a minimum guarant Yield strength of 355 MPa. Rear stability beam, Top horizontal beam, Slotted angle for top horizontal beam and bracings shall be made of Hot rosteel sheet equivalent to IS 2062, E250 with a minimum guaranteed Yield strength of 255 MPa. Tubes for Weld mesh frame shall be made of tubes conforming to IS: 1161 / IS:1239 or equivalent Module cover, Front cover and Rear cover shall be made from steel sheet conforming to IS: 513-D All other Hot rolled steel sheet used in construction shall be equivalent to IS: 10748 / IS: 2062 or equivalent All fasteners shall be of minimum 8.8 grade conforming to IS 1367 						
Design Criteria Mfg	Unless otherwise specified, component specifications mentioned in this document are based on design provisions of IS 800 801. Manufacturers desirous of using own detailing shall ensure conformity of their designs to IS 800 / 801 provisions On receipt of order, the manufacturer shall submit the Quality Assurance Plan						
Quality	Process / Component	Characteristics	Method	Acceptance Norm	Certifying agency		
	RAW MATERIAL						
	CR Steel	Mechanical properties	Test & Analysis	W 512 C 1 D	6 1		
	CR Steel	Chemical properties	Analysis report	IS 513 - Grade D	Supplier		
	HR Steel	Mechanical properties	Test & Analysis	IS 10748 / IS 5986 /	Supplier		
	HR Steel	Chemical properties	Analysis report	IS 2062	Supplier		
	T. 1	Mechanical properties	Test & Analysis	TO 1020 / TO 11/1	G		
	Tube	Chemical properties	Analysis report	IS 1239 / IS 1161	Supplier		
	METAL FORMING & WELDING Metal forming & Welding	Dimension	Measuring Tape / Vernier	As per Drawing	Supplier		
	POWDER COATING Powder coating (Epoxy Polyester)	Gloss @ 60°	Sample Test	65 - 75 Gloss value	Supplier		
		powder coating thickness (Avg)		DFT 35 μ (Avg)			
		Adhesion		No loss of full grid			
		Cure test		No bare metal exposed			
	Color: As per RAL standard	Impact resistance		No cracks			
	The state of the s	Pencil hardness		No scratch marks			
	,	Conical mandrel (6mm)		No peel off			
	FINAL INSPECTION Documents	Verification of documents	Random	ВОМ	Supplier		
Mfg Folerances	 Overall sizes of the u Manufacturing tolera 	ecified the following tolerances sha unit shall be within ±50mm unces for individual components sh shall be maintained within 15mm					
inal	1. All mild steel compo	ments unless otherwise specified sl					
inish		sh. The Dry Film Thickness (DFT) components shall be subjected to					
	Greasing as per IS 6005, Rinsing, Phospating as per IS 3618 and De-mineralized water rinsing.						
	Weld mesh shall be powder coated. Clamps shall be Chrome plated,						
	Turn buckle shall be	galvanized.					
cheme	 Uprights and beams: Graphite grey powder coated. Module cover, front fascia & rear cover: Prince Grey (RAL 7035) powder coated. 						
	3. Weld mesh frame: Pr	ince Grey (RAL 7035) powder coa	ited				

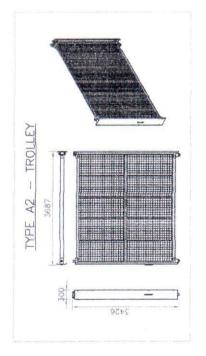


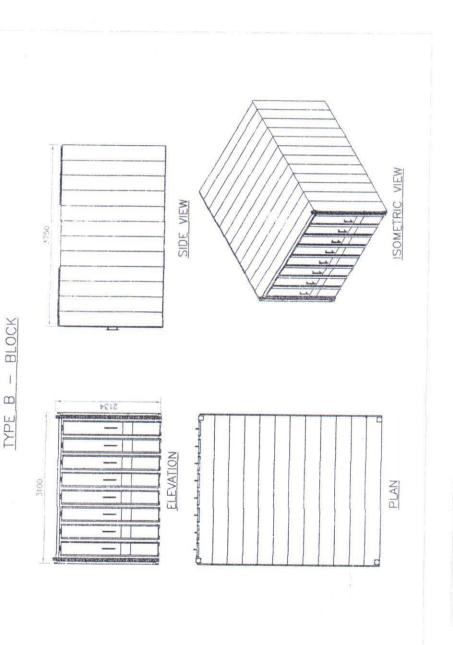
TOP RAIL STORAGE UNIT OF SIZE 3100 (Width for 8 pull-out trellegs) X 3750 (Depth) X 3600 (Height) mm (siste distance – 5750 mm).



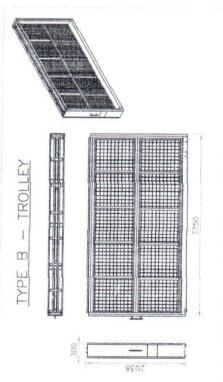


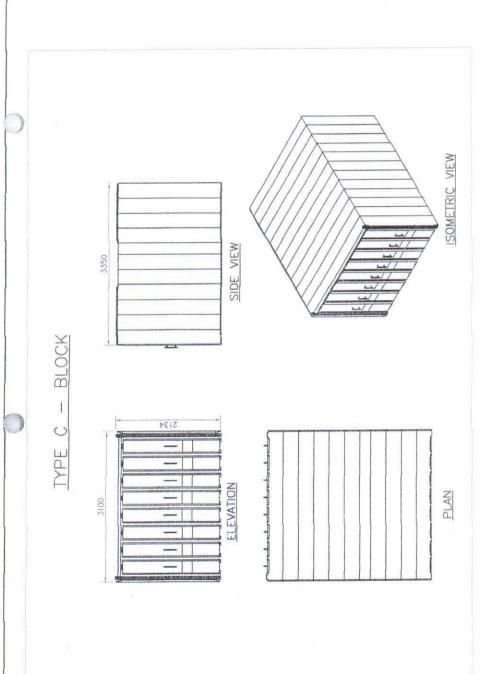




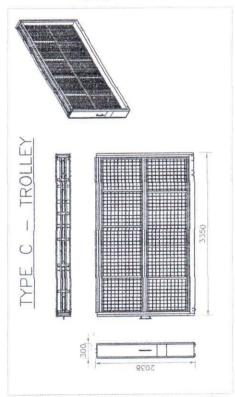


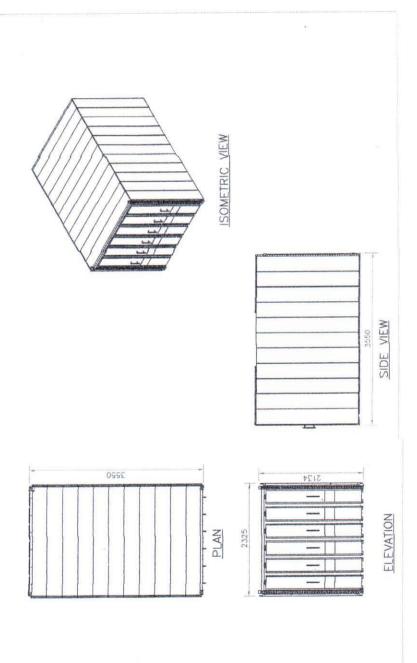
Trolley Specification
BOTTOM RAIL STORAGE UNIT OF SIZE 3100 (Width for 8 pull-out trolleys) x 3750 (Depth) x 2134 (height) rrm (aisle distance - 3450 mm).





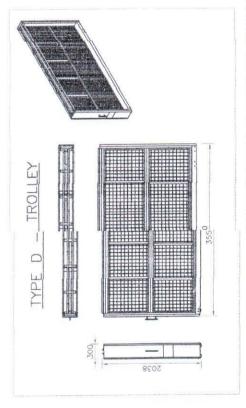


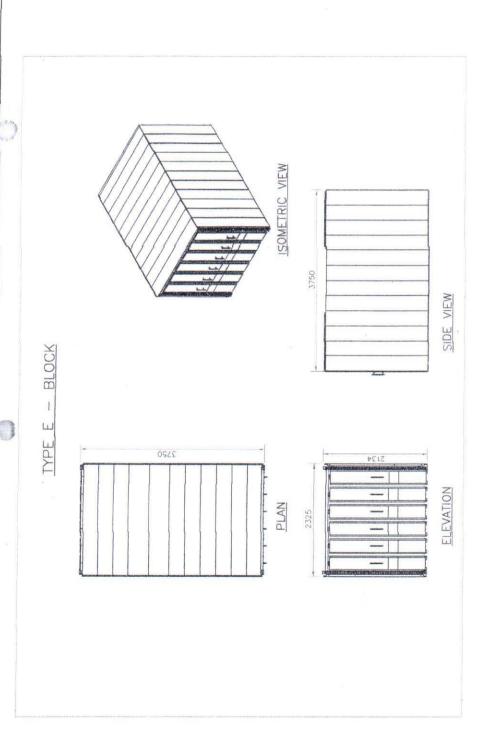




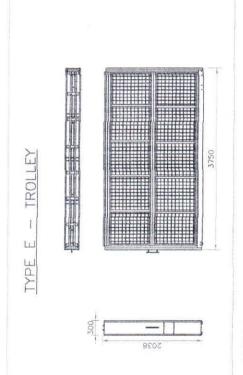
TYPE D - BLOCK

Trolley Spēcification
BOTTOM RALL STORAGE UNIT OF SIZE 2325 (Width for 6 pull-out frolleys) X 3550 (Depth) X 2134 (height) mm (gisle distance — 3250 mm).





Irolley Specification
BOTTOM Rale STORAGE UNIT OF SIZE 2325 (Width
for 6 pull-out trolleys) X 3750 (Depth) X 2134
(height) mm (aisle distance – 3450 mm).



LAYOUT

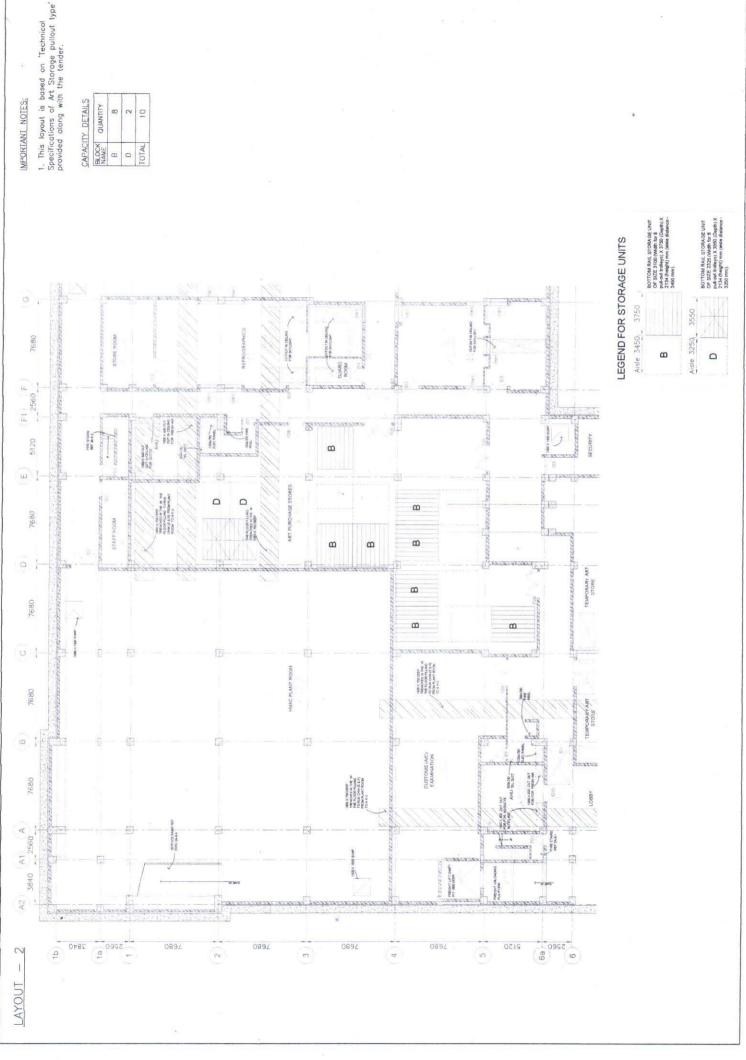
1. This layout is based on Technical Specifications of Art Storage pullout type' provided along with the tender.

CAPACITY DETAILS

QUANTITY	2		24	2	-	-	31
BLOCK	A1	A2	В	O	0	ш	TOTAL

LEGEND FOR STORAGE UNITS Aisle 3750 3750 A Aisle 3450 Aisle 3050

A.H.U sox 288 carbura ne ceuse SELVAND OUT 180 X 180 CELLING AZ A1 8 B B œ 8 3840 ___2560___ m 72 2560 12a 2560 0897 0897 0894 2120 0894



Section - V

Layout Plans

Proforma

- 1. Technical Bid
- 2. Questionnaire
- 3. Commercial Details and Previous Experience
- 4. Statement of Deviations
- 5. Price Bid

Performa - I

National Gallery of Modern Art Jaipur House, India Gate, New Delhi-110003

TECHNICAL BID

FORMAT FOR TECHNICAL BID FOR COMPREHENSIVE AMC OF CCTV AND SECURITY SYSTEM AT NGMA, NEW DELHI

1.	Name of the Firm	:	
2.	Complete Address & Telephone Numbers	:	
a)	Date of incorporation / Establishment of the firm		
b)	Telephone No. (s) of Contract Person.	*:	
c)	Fax No.	.:	
d)	Email Id.	1	
e)	Website	:	
3.	Whether the company is a proprietorship firm, Pvt. Firm, Ltd. Co, if so the names of the owner / Directors etc., be furnished.	:	
4.	PAN NO.	•:	4
5.	TIN No.	:	
6.	Sales Tax / Vat Registration No.	-	
7.	Profile of the Firm	:	Attach a separate sheet alongwith brochure
8.	Turnover of the Company (Annual Turn Over)	:	Year Annual Turnover 2011-2012 : Rs. 2010-2011 : Rs. 2009-2010 : Rs.
		,	(Attach attested copies of balance sheets / IT returns for the last 3 years

9.	Infrastructure facilities			
a)	Office space available in Sq. ft.	:		
b)	Details of workshop / manufacturing facilities available in Sq. ft.	:		
c)	Manpower details (Attach organization chart)	:		-
10.	Whether the questionnaire as per (Proforma- 2 attached)			
11.	Whether statement showing the work undertaken Previously as per Proforma -3 attached.			
12.	Whether the deviation statements as per proforma 4 attached			
13.	Details of Specified Storage System manufactured by the company.	:		
14.	Quality of System, BIS/ISO etc. implemented by the company.	*		
15.	Earnest Money deposit	:	Attach Demand Draft (Pay Order)	
a)	Demand Draft No.	:		
b)	Date			
c)	Drawn on	.:		
d)	Rupees in figure & words	:	Rs(Rupees)	

Place	*	x.
Date	1	Signature:
		Name & Address with seal

Proforma - 2

This Questionnaire below shall be duly filled in by the bidder and returned along with Technical Bid. This will be the basis of qualification to open Price Bid. Clauses confirmed hereunder need not be repeated in the Bid. ALL THE COMMERCIAL TERMS SHOULD BE INDICATED IN THIS FORMAT ONLY.

S. No.	Description	Bidder's Confirmation
(A)	TECHNICAL	
1.	Acceptance of technical specifications	
	including General Technical notes and scope	
	of supply as per bid documents/drawings	
2	attached along with.	
2.	In case of technical deviations confirm that the	
	same has been indicated separately with specific reference of the clauses against with	
	deviations are taken. Refer the deviation	
	statements (Proforma – 4)	
3.	Confirm data sheets/technical questionnaire	
٠.	duly filled in are attached wherever required.	
4.	Confirm spare parts list, wherever required,	
	with item wise prices have been submitted for	
	two years trouble free operation.	
5.	Confirm the bidder shall be able to offer	
	complete solution by procuring certain custom	
	made designs and products from Owner	
	recommended companies as mentioned in	
	below clauses 5.1 & 5.2.	
5.1	Confirm the bearings with mentioned technical	
5.2	specification are procured from M/s SKF. Confirm the specified rollers are procures from	
3.2	M/s Rexello.	
(B)	COMMERCIAL & OTHER CONDITION	
6.	It is noted that deviations to Terms &	
-	Conditions shall lead to loading of prices or	
	rejection of offer. In complete or partial	
	confirmation contained in set may adversely	
	affect evaluation of offer.	
7.	Quoted prices are based on FOR Site including	*
	packing & forwarding.	
8.	Indicate separately freight charges including	
	transit insurance up to Site by Road, including	
0	loading and unloading charges.	
9.	Confirm the location & address of dispatch	
10	point.	
10.	Indicate rate of central / local sales tax	
	whichever applicable.	

(i)	CST without concessional Form.	V
(ii)	CST with concessional Form	
(iii)	Local Sales Tax/ VAT (in case supplies are made from originating state) without concessional Form.	
(iv)	Local Sales tax / VAT with concessional Form.	
10.1	Indicate present rate of excise duty applicable on the supplies (including spares) and mention it clearly.	
10.2	If excise duty is presently not applicable, confirm whether the same will be borne by bidder in case it becomes leviable later.	
10.3	Confirm you have considered the CENVAT (MODVAT) benefit on Raw materials to your account for quoting the rates.	
11.	Indicate shortest delivery period, which will be counted from date of Fax/letter of acceptance, if placed.	
12.	Confirm acceptance of relevant Terms of Payment specified .	
13	Confirm quoted prices will remain firm and fixed till complete execution of the Order.	
14.	Confirm that Performance Bank Guarantee will be furnished for 10% of Purchase Order value as per terms and conditions. Deviation may render your offer liable for rejection or price-loading by equivalent percentage at our discretion.	
15.	Confirm quoted prices are inclusive of all other testing charges as required.	
16.	Confirm acceptance of part order. However, the full quantity for each item as far as possible shall be ordered on one Vendor. All lump-sum charges shall be taken on pro-rata on value basis.	
17.	Confirm acceptance of repeat orders within 3 months from the date of purchase order in the same price basis.	
18	Mention Installation charges separately along with applicable service charges.	
19	Confirm site visit is made and all relevant site or civil work is included in the your price.	

20.	Confirm all the terms and conditions indicated in this format including Annexure and have not been repeated in the bid elsewhere. It is noted that Terms & Conditions indicated elsewhere may be ignored.	
21.	Confirm that the offer shall be valid up to 6 months from the bid due date/extended due date.	
(C)	Conditions for Factory Inspection (Bidder Evaluation)	
22.	Confirm the self certified lab facility for testing is available in own premises for following tests. a. Upright load test.	
	b. Salt Spray Test c. DFT Test d. Gloss Test e. Adhesion test f. Cure Test g. Impact Resistance h. Pencil hardness test i. Conical mandrel test	
23.	Confirm whether charges for third party inspection for each lot of dispatch are included in the quoted price.	
24.	Owner will not provide any import license or any related document for import benefits.	
25.	Confirm proto sample system of module mutually agreed by Owner & Bidder will be made ready within 30 days of Owner's intimation prior to award of contract to the qualified bidder. In case the qualified bidder is not ready with the proto systems as per agreed specification within 30 days Owner has the right to reject the bidder.	

Proforma-3

PROFORMA FOR COMMERCIAL DETAILS & PREVIOUS EXPERIENCE (To be attached with Technical bid)

(i) Name of the firm

(ii) Name and Address of the Bankers:

Details of Major orders for the quoted supplies / services executed during the past three years should be furnished in the following format.

Sl. #	Full Address of customer	Order No. and Date	Description of supplies / services	Contract Value in Rs.	Remarks
			•		2
	- 3	v			<u> </u>
10 21 10 2				0	

Signature:	 	• •	0 (•	•	•		
Name:	 		•						
Designation:									•

NOTE: A certificate from the customer should preferably be enclosed to indicate that the contract was satisfactorily performed.

PROFORMA FOR STATEMENT OF DEVIATIONS FROM TENDER CONDITIONS (To be attached with Technical Bid)

The following are the particulars of deviations from the requirements of the specifications and Terms & Conditions of Contract:-

CLAUSE	DEVIATION	REMARKS (Including justification)
. ,		
		,

Signature and seal of the Authorized Signatory

NOTE: - Where there is no deviation, the statement should be returned duly Signed with an endorsement indicating "No Deviations"

Price Bid

Sl. No.	Description	Quantity (Nos.)	Unit Price (Rs.)	Total Price (Rs.)
1.	Composite Art Storage units as per Specifications & drawings in the Tender Documents			*
1.1	Type A1 (Single Aisle) (H.W.D. 3600:3100:3750 mm) (Operating aisle 7500mm) 8 pullout panels per block	2 Nos.		
1.2	Type A2 (Common Aisle) (H.W.D. 3600:3100:3750 mm) (Operating aisle 11250mm) 16 pullout panels per block	32 Nos.		
1.3	Type B (H.W.D. 2134:3100:3750 mm) (Operating aisle 7200mm) 8 pullout trolley within the frame Assembly			
1.4	Type C (H.W.D. 2134:3100:3750 mm) (Operating aisle 6400mm) 8 pullout trolley within the frame Assembly	2 Nos.		
1.5	Type D (H.W.D. 2134:2325:3550 mm) (Operating aisle 6800mm) 6 pullout trolley	3 Nos.		
1.6	Type E (H.W.D. 2134:2325:3750 mm) (Operating aisle 7200mm) 6 pullout punch per block	1 No.		

Taxes applicable (indicate tax incidentals)

- It is hereby certified that we have understood the technical specifications and the terms & Conditions of contract attached to the tender and have thoroughly examined and are aware of the nature of supplies / services required and our offer is to render supplies / services strictly in accordance with the requirements and according to the terms of the tender. We agree to abide solely by the terms & conditions of contract and other conditions of the tender in accordance with the tender documents if the contract is awarded to us.
- 2. We hereby offer to render supplies / services as detailed above or such portion thereof as you may specify in the acceptance of tender at the price quoted and agree to hold this offer open for acceptance for a period of 4 months from the date of opening of tender. We shall be bound by the communication of acceptance dispatched within the prescribed time.
- 3. We possess the necessary License from the Government of India / State Government for rendering the supplies / services.

Dated: ----- Signature and seal of the bidder Authorized signatory

Note:

- a. The offer must be submitted as per above proforma. The Bidder may use his letter head to submit his offer.
- b. No erasures or alternations in the text of the offer are permitted.
- c. Any correction made in offer shall be initialed by the bidder.
- d. FIGURES should be both in figures and Words.