ANDHRA PRADESH EDUCATION & WELFARE INFRASTRUCTURE DEVELOPMENT CORPORATION



AGREEMENT

Name of the work:

Procurement of Dual Desks Type I, II, III & IV to the Government Schools (Educational Institutions) of West Godavari, Krishna and Guntur (3) Districts as Package-II in Andhra Pradesh Under MANABADI: NADU-NEDU (Phase-II)

Name of the Agency:

Zenith Metaplast Pvt Ltd, F-18, MIDC Satpur, Nasik-422007, Maharastra

Estimate Cost:

Rs. 64.60 Crores

O/o The Managing Director, APEWIDC, Vaddeswaram (V) Tadepally (M), Guntur District

ZENITH METAPLAST PVT. LTD.

N	ame of the W	Annexure-A ork: Procurement of Dual Desks Type I, II, III & IV the Government Schools (Educational	(nstitutions	s) of West e-II)
I.No	Godavarl Quantity in	Krishna and Guntur (3) District as Package-II in Andhra Pradesh Under MANABADI: NADU-N Description of Item	per	Amount in Rs.
, 0	Numbers		number	H 12 05 025
1	6841	Supply & assembling of Dual Desk TYPE-I [for class I and II]	10435	7,13,85,835
		(Multi Color)	Parket Contract	
		The overall dimensions of desk will be W 1066mm x D 890mm x H 628mm (For table		
		top). The seating bench height shall be 383 mm. The desk shall be manufactured as per		
		the specifications mentioned below:		
		1. Table top shall be made up of 18.0 mm thick plywood (tolerance as per IS 303)		
		of MR Grade OSL (one side shall be laminated, and other side shall have balancer		
		finish). Table top dimensions shall be <u>W 1015.20 mm x D 380.0 mm</u> . Edge towards bench shall be post formed with round edge. The remaining three edges must be		
		sealed with 2mm thick PVC edge banding tape. Edge band must be trimmed on edges		
		and corners. Make of Plywood: Greenply / Century / Kitply. Make of Laminate &		
		balancer: Marino / Greenlam / ASIS / Century.		
		2. Side frame structure: Made of CRCA press-formed section having two Nos of		
		50mmx25.4mm Rectangular Pipe sections 1.2mm thick and joined by "C "channel of		
		size 65mmx25.4mm and 1.2mm thickness and MIG Welded to rectangular		
		pipe of 25.4 mm x 50.0 mm x 1.2mm thickness (850mm Bottom length) by using extra stiffeners of C-section made up of 62.60mmx 25mmx25mm & 3.0 mm thickness sheet		
		and 100mm long. Side frame structure top 50mmx25.4mm x1,2mm Rectangular Pipes		
		covered with CRCA sheet 165mmx134.60mmx1.2mm including top folding, and	The state of	
		105mmx161.20mm x1.2mm including top & bottom folding and 110mm x 137.2mm		
		(average) x 1.2mm including top & bottom folding as per drawing appended. Make for		
		CRCA sheet – ESSAR / TATA / SAIL / JINDAL. Proposed desk should be ROHS certified		
		from INTERTEK / UL. Valid certificate to be submitted along with the bid. 3. Seat and back rest frame structure: Made of CRCA press formed section having		
		two po's of 50mm x 25.4mm Rectangular pipe sections 1.20mm thick and joined by C-		
		shappel of size 65mm x 25.4mm x 25.4mm and 1.20mm thickness and MiG weided to		
		pine at the bottom and on top welded to MS pipe of 25.4mm diameter and 1.20mm	Marie Territoria	
		thickness Seat Back Rest & table top are supported by 8 numbers of stiffeners with		
		MS Tube of 25.4 mm x 25.4mm 1.2 mm thickness square Pipe section (each of length 1015.20mm) MIG welded to side frames at relevant locations. Square pipe of size 20.0		
		mm x 20.0 mm x 1.2 mm thickness and 100.0 mm long shall be welded to the frame to		
		hold the horizontal supports. Raw materials of MS tubes shall be from ESSAR / TATA /	1	
		CALL / HAIDAL		
		Ass Bostongular Pine sections of dimensions 50.0 mm x 25.40 mm x 1.2 mm		
		this was shall be closed with PPCP (Poly Propylene Copolymer) cap at both the ends	'	
	24	Pipe diameter 25.4 mm x 1.2 mm thickness shall be closed with PPCP cap at back side		
		and under the seat. 5. Upper modesty panel and shelf shall be made of 0.8 mm thick CRCA sheet. The	9	
		I the prince for upper modesty panel shall be H 175.0 mm x W 1015.20 mm x D 25.	,	
		The dimensions of shelf shall be W 1015,20 mm X D 300.0 mm X H 23.0 mm.	-	
		abolt about have vertical partition at the center. This partition shall be made up to	•	
		and the place having size 25.40 mm x 25.40 mm x 1.2 mm thickness. Stilletters of Wi	3	
		pipe having sizes as 20.0 mm x 20.0 mm x 1.2 mm thickness shall be provided in upper modesty panel. And shelf front fascia of upper modesty panel of desk shall have	e	
		archagod dorigo. The corners of shelf (projecting towards the seating bench) shall be	C	
		I blessed some forming technology (without welding) to avoid injury in case	C	
		at anidontal impact. The thickness of sheet of shelf shall be 0.80mm. From face of	,,	
		Upper Modesty panel should have embossed letters of NADU-NEDU 2021 as shown	"	
		drawing. 6 Additional lower modesty panel having size H 150.0 mm x W 1015.20 mm X D 23.	о	
		mm shall be made up of 0.8 mm thick CRCA sheet with designer square perforations.		
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		WAS DISED SIGNATORY	W) Numerica
	Aut	horized Signature of the QJ.T.B. APEW.	naging L	vawada
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		(A)		

across the length at the bottom side of lower modesty panel.

7. Seat and back rest shall be made of 18mm thick plywood of MR Grade OSL (one side shall be laminated, and other side shall have balancer finish) except back rest. Back rest shall have both sides colour lamination

Technical details of seat and back rest are mentioned below:

Seating bench dimensions shall be W 1066.0 mm X D 300.0 mm: Front side shall be rounded with post forming. Remaining three edges shall be sealed with 2mm thick PVC edge banding tape.

- 7.1 Back rest dimensions shall be W 1066.0 mm x D 250.0 mm: Upper side shall be rounded with post forming. Remaining three edges shall be sealed with 2mm thick PVC edge banding tape.
- 7.2 Seat and back rest shall be fitted to the frame with MAZAK self Tapping inserts (Make: ebco/HETTICH) of size M6 x 13mm.
- 7.3 Leg space between top and seat shall be 110mm.
- 8. Bag/bottle hooks shall be made of CRCA sheet. The overall size of hook shall be 135 mmx25.4mmx3mm, (80mm+23mm+32mm) It shall be welded on inner facia of both the vertical press-fitted steel sections.
- The MIG / Spot welding shall be done as per technical requirement.
- 10. All metal components shall be powder coated in satin finish with pretreatment process. Powder coating shall be tested and certified on following parameters from NABL Accredited/ Government Laboratory, Valid certificates / test reports to be submitted along with the bid.
- 10.1 Adhesion test; EN ISO 2409 (2 mm).
- 10.2 Impact resistance test: ASTM D 2794 (5/9' ball) on applying 180 kg of impact
- 10.3 1000 hrs. humidity test as per ISO 6270.
- 10.4 Salt spray (FOG) test: 1000 hours as per ASTM B 117.
- 10.5 Cross Hatch Adhesion test as per ASTM: D3359.
- 10.6 Conical Mandrel Test as per ASTM: D522.
- 10.7 Scratch Test as per IS:101-1964 by applying 2 kg load.

Laminate Sheets Makes & Color codes:

SI. No	Luminate colour	Make	Shade/ Colour Code	Make	Shade/ Colour code	Make	Shade/ Colour code
1	Parrot Green	Merino	21143	Green lam	251 SF	ASIS	172
2	Ink Blue	Merino	21032	Green lam	304 SF	ASIS	1027
3	Bubble Gum (pink)	Merino	21114	Green lam	173 SF	ASIS	1111
4	Saffron (orange)	Merino	21024	Green Jam	217 SF	ASIS	1150
5	Cardinal Red	Merino	21065	Green lam	203 SF	ASIS	1114

STRUCTURE POWDER COATING COLOUR-CODE-Ral-9010

(Make: AKZONobel/Nerolac/ Asian/ JOTUN)

Supply & delivery of finished item including cost and conveyance of all materials ,loading ,unloading, stacking at school site and fixing , inclusive of GST and all other Taxes etc., complete as applicable from time to time, and all other incidental charges etc., complete for finished item of work to the government schools in the state of Andhra Pradesh.

ZENI Flivitiem Bhair Carry a warranty period of 5 (Five) years from the date of supply & fixing.

MAUTITORISED SIGNATOR
Authorized Signature of the

firm/company

V - 1/29/0/12

Managing Director, APEWIDC, Vijayawada

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	Annexure-A	Rate	Amount in Rs
Quanti No in		per number	Amount in Ka
Numbe 2 13101	Supply & Placing Dual TYPE-II for class III to V	10451	13,69,18,55
2 13101	(Multi Color)		
and the same of th	The overall dimensions of desk will be W 1066mm x D 905mm x H 688mm (For table		
	top). The seating bench height shall be 423 mm. The desk shall be manufactured as per		
	the specifications mentioned below:		
	1. Table top shall be made up of 18.0 mm thick plywood (tolerance as per IS 303) of MR Grade OSL (one side shall be laminated, and other side shall have balancer finish). Table top dimensions shall be W1015.20 mm x D 380.0 mm . Edge towards bench shall be post formed with round edge. The remaining three edges must be sealed with 2mm thick PVC edge banding tape. Edge band must be trimmed on edges and corners. Make of Plywood: Greenply / Century / Kitply. Make of Laminate & balancer: Marino / Greenlam / ASIS / Century.		
	 Side frame structure: Made of CRCA press-formed section having two Nos of 50mmx25.4mm Rectangular Pipe sections 1.2mm thick and joined by "C "channel of size 65mmx25.4mm and 1.2mm thickness and MIG Welded to rectangular pipe of 25.4 mm x 50.0 mm x 1.2mm thickness (865mm Bottom length) by using extra stiffeners of C-section made up of 62.60mmx 25mmx25mm & 3.0 mm thickness sheet and 100mm long. Side frame structure top 50mmx25.4mm x1.2mm Rectangular Pipes covered with CRCA sheet 165mmx134.60mmx1.2mm including top folding, and 105mmx161.20mm x1.2mm including top & bottom folding and 110mm x 137.2mm (average) x 1.2mm including top & bottom folding as per drawing appended. Make for CRCA sheet — ESSAR / TATA / SAIL / JINDAL. Proposed desk should be ROHS certified from INTERTEK / UL. Valid certificate to be submitted along with the bid. Seat and back rest frame structure: Made of CRCA press formed section having two no's of 50mm x 25.4mm Rectangular pipe sections 1.20mm thick and joined by C-channel of size 65mm x 25.4mm x 25.4mm and 1.20mm thickness and MIG welded to pipe at the bottom and on top welded to MS pipe of 25.4mm diameter and 1.20mm thickness. Seat, Back Rest & table top are supported by 8 numbers of stiffeners with MS Tube of 25.4 mm x 25.4mm 1.2 mm thickness square Pipe section (each of length 1015.20mm) MIG welded to side frames at relevant locations. Square pipe of size 20.0 mm x 20.0 mm x 1.2 mm thickness and 100.0 mm long shall be welded to the frame to hold the horizontal supports. Rav materials of MS tubes shall be from ESSAR / TATA / SAIL / JINDAL. 		
	 MS Rectangular Pipe sections of dimensions 50.0 mm x 25.40 mm x 1.2 mm thickness shall be closed with PPCP (Poly Propylene Copolymer) cap at both the ends. Pipe diameter 25.4 mm x 1.2 mm thickness shall be closed with PPCP cap a back side and under the seat. Upper modesty panel and shelf shall be made of 0.8 mm thick CRCA sheet. The dimensions for upper modesty panel shall be H 175.0 mm x W 1015.20 mm X 23.0 mm. The dimensions of shelf shall be W 1015.20 mm X D 300.0 mm X H 23.0 mm. 	e D O	
	mm. The shelf shall have vertical partition at the center. This partition shall be made up of square MS Pipe having size 25.40 mm x 25.40 mm x 1.2 mm thickness Stiffeners of MS pipe having sizes as 20.0 mm x 20.0 mm x 1.2 mm thickness shall be provided in upper modesty panel. And shelf front fascia of upper modesty panel of desk shall have embossed design. The corners of shelf (projecting towards the seating bench) shall be rounded through corner-forming technology (without welding) to avoid injury in case of accidental impact. The thickness of sheet of she shall be 0.80mm. Front face of Upper Modesty panel should have embossed letter and the shall be 0.80mm. Front face of Upper Modesty panel should have embossed letter and the shall be 0.80mm as the shown in displaying and the shall be 0.80mm as the shown in displaying and the shall be 0.80mm as the shall be 0	all el e	

mm shall be made up of 0.8 mm thick CRCA sheet with designer square perforations. Stiffeners of MS pipe having size 20.0 mm x 20.0 mm x 1.2 mm thickness shall be fixed across the length at the bottom side of lower modesty panel.

 Seat and back rest shall be made of 18mm thick plywood of MR Grade OSL (one side shall be laminated, and other side shall have balancer finish) except back rest. Back rest shall have both sides colour lamination

Technical details of seat and back rest are mentioned below:

Seating bench dimensions shall be W 1066.0 mm X D 300.0 mm; Front side shall be rounded with post forming. Remaining three edges shall be sealed with 2mm thick PVC edge banding tape.

- 7.1 Back rest dimensions shall be W 1066.0 mm x D 250.0 mm: Upper side shall be rounded with post forming. Remaining three edges shall be sealed with 2mm thick PVC edge banding tape.
- 7.2 Seat and back rest shall be fitted to the frame with MAZAK self Tapping inserts (Make: ebco/HETTICH) of size M6 x 13mm.
- 7.3 Leg space between top and seat shall be 125mm.
- 8. Bag/bottle hooks shall be made of CRCA sheet. The overall size of hook shall be 135 mmx25.4mmx3mm, (80mm+23mm+32mm) It shall be welded on inner facia of both the vertical press-fitted steel sections.
- 9. The MIG / Spot welding shall be done as per technical requirement.
- 10. All metal components shall be powder coated in satin finish with pretreatment process. Powder coating shall be tested and certified on following parameters from NABL Accredited/ Government Laboratory, Valid certificates / test reports to be submitted along with the bid.
 - 10.1 Adhesion test: EN ISO 2409 (2 mm).
 - 10.2 Impact resistance test: ASTM D 2794 (5/9' ball) on applying 180 kg of impact load.
 - 10.3 1000 hrs. humidity test as per ISO 6270.
 - 10.4 Salt spray (FOG) test: 1000 hours as per ASTM B 117.
 - 10.5 Cross Hatch Adhesion test as per ASTM: D3359.
- 10.6 Conical Mandrel Test as per ASTM: D522,
- 10.7 Scratch Test as per IS:101-1964 by applying 2 kg load.

Laminate Sheets Makes & Color codes:

SI. No	Luminate colour	Make	Shade/ Colour Code	Make	Shade/ Colour code	Make	Shade/ Colour code
1	Parrot Green	Merino	21143	Green lam	251 SF	ASIS	172
2	Ink Blue	Merino	21032	Green lam	304 SF	ASIS	1027
3	Bubble Gum (pink)	Merino	21114	Green lam	173 SF	ASIS	1111
4	Saffron (orange)	Merino	21024	Green lam	217 SF	ASIS	1150
5	Cardinal Red	Merino	21065	Green lam	203 SF	ASIS	1114

STRUCTURE POWDER COATING COLOUR-CODE=Rel-9010 (Make: AKZONobel/Nerolac/ Asian/ JOTAN)

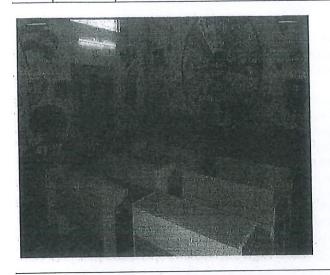
Authorized Signature of the GNATORY firm/company

ZENITH METAPLAST PVT. LTB

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Managing Director, APEWIDC, Vijayawada Supply & delivery of finished item including cost and conveyance of all materials ,loading ,unloading, stacking at school site and fixing , inclusive of GST and all other Taxes etc., complete as applicable from time to time, and all other incidental charges etc., complete for finished item of work to the government schools in the state of Andhra Pradesh.

The item shall carry a warranty period of 5 (Five) years from the date of supply & fixing.





		Annexure-A		
SI.No	Quantity in Numbers	Description of Item	Rate per number	Amount in Rs.
3	17564	Supply & Placing Dual TYPE-III for class VI to VII (Multi Color) The overall dimensions of desk will be W 1066mm x D 930mm x H 760mm (For table top). The seating bench height shall be 452 mm. The desk shall be manufactured as per the specifications mentioned below:	10531	18,49,66,484
		 Table top shall be made up of 18.0 mm thick plywood (tolerance as per IS 303) of MR Grade OSL (one side shall be laminated, and other side shall have balancer finish). Table top dimensions shall be W 1015.20 mm x D 380.0 mm. Edge towards bench shall be post formed with round edge. The remaining three edges must be sealed with 2mm thick PVC edge banding tape. Edge band must be trimmed on edges and corners. Make of Plywood: Greenply / Century / Kitply. Make of Laminate & balancer: Marino / Greenlam / ASIS / Century. 		
	21	2. Side frame structure: Made of CRCA press-formed section having two Nos of 50mmx25.4mm Rectangular Pipe sections 1.2mm thick and joined by "C "channel of size 65mmx25.4mm and 1.2mm thickness and MIG Welded to rectangular pipe of 25.4 mm x 50.0 mm x 1.2mm thickness (890mm Bottom length) by using extra stiffeners of C-section made up of 62.60mmx 25mmx25mm & 3.0 mm thickness sheet and 100mm long. Side frame structure top 50mmx25.4mm x1.2mm Rectangular Pipes covered with CRCA sheet 165mmx134.60mmx1.2mm including top folding, and 105mmx161.20mm x1.2mm including top & bottom folding and 110mm x 137.2mm (average) x 1.2mm including top & bottom folding as per drawing appended. Make for CRCA sheet — INTERTEK / UL. Valid certificate to be submitted along with the bid.		

Authorized Signature of the ATORY firm/company

Managing Director,
APEWIDC, Vijayawada

- Seat and back rest frame structure: Made of CRCA press formed section having two no's of 50mm x 25.4mm Rectangular pipe sections 1.20mm thick and joined by C-channel of size 65mm x 25.4mm x 25.4mm and 1.20mm thickness and MIG welded to pipe at the bottom and on top welded to MS pipe of 25.4mm diameter and 1.20mm thickness. Seat, Back Rest & table top are supported by 8 numbers of stiffeners with MS Tube of 25.4 mm x 25.4mm 1.2 mm thickness square Pipe section (each of length 1015.20mm) MIG welded to side frames at relevant locations. Square pipe of size 20.0 mm x 20.0 mm x 1.2 mm thickness and 100.0 mm long shall be welded to the frame to hold the horizontal supports. Raw materials of MS tubes shall be from ESSAR / TATA / SAIL / JINDAL.
- MS Rectangular Pipe sections of dimensions 50.0 mm x 25.40 mm x 1.2 mm thickness shall be closed with PPCP (Poly Propylene Copolymer) cap at both the ends. Pipe diameter 25.4 mm x 1.2 mm thickness shall be closed with PPCP cap at back side and under the seat.
- 5. Upper modesty panel and shelf shall be made of 0.8 mm thick CRCA sheet. The dimensions for upper modesty panel shall be H 175.0 mm x W 1015.20 mm x D 23.0 mm. The dimensions of shelf shall be W 1015.20 mm X D 300.0 mm X H 23.0 mm. The shelf shall have vertical partition at the center. This partition shall be made up of square MS Pipe having size 25.40 mm x 25.40 mm x 1.2 mm thickness. Stiffeners of MS pipe having sizes as 20.0 mm x 20.0 mm x 1.2 mm thickness shall be provided in upper modesty panel. And shelf front fascia of upper modesty panel of desk shall have embossed design. The corners of shelf (projecting towards the seating bench) shall be rounded through corner-forming technology (without welding) to avoid injury in case of accidental impact. The thickness of sheet of shelf shall be 0.80mm. Front face of Upper Modesty panel should have embossed letters of NADU-NEDU 2021 as shown in drawing.
- Additional lower modesty panel having size H 150.0 mm x W 1015.20 mm X D 23.0 mm shall be made up of 0.8 mm thick CRCA sheet with designer square perforations. Stiffeners of MS pipe having size 20.0 mm x 20.0 mm x 1.2 mm thickness shall be fixed across the length at the bottom side of lower modesty panel.
- 7. Seat and back rest shall be made of 18mm thick plywood of MR Grade side shall be laminated, and other side shall have balancer finish) except back rest. Back rest shall have both sides colour lamination

Technical details of seat and back rest are mentioned below:

Seating bench dimensions shall be W 1066.0 mm X D 300.0 mm; Front side shall be rounded with post forming. Remaining three edges shall be sealed with 2mm thick PVC edge banding tape.

- 7.3 Back rest dimensions shall be W 1066.0 mm x D 250.0 mm; Upper side shall be rounded with post forming. Remaining three edges shall be sealed with 2mm thick PVC edge banding tape.
- 7.4 Seat and back rest shall be fitted to the frame with MAZAK self Tapping inserts (Make: ebco/HETTICH) of size M6 x 13mm.
- 7.3 Leg space between top and seat shall be 150mm.
- 8. Bag/bottle hooks shall be made of CRCA sheet. The overall size of hook shall be 135 mmx25.4mmx3mm, (80mm+23mm+32mm) It shall be welded on inner facia of both the vertical press-fitted steel sections.
 - 9. The MIG / Spot welding shall be done as per technical requirement.
- 10. All metal components shall be powder coated in satin finish with pretreatment process. Powder coating shall be tested and certified on following parameters from ZENITNABU Accedited / Government Jaboratory, Valid certificates / test reports to be

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Managing Director, APEWIDC, Vijayawada

submitted along with the bid.

10.8 Adhesion test: EN ISO 2409 (2 mm).

10.2 Impact resistance test: ASTM D 2794 (5/9' ball) on applying 180 kg of impact load.

10.91000 hrs. humidity test as per ISO 6270.

10.4Salt spray (FOG) test: 1000 hours as per ASTM B 117.

10.5 Cross Hatch Adhesion test as per ASTM: D3359.

10.6Conical Mandrel Test as per ASTM: D522.

10.7 Scratch Test as per IS:101-1964 by applying 2 kg load.

Laminate Sheets Makes & Color codes:

SI. No	Luminate colour	Make	Shade/ Colour Code	Make	Shade/ Colour code	Make	Shade/ Colour code
1	Parrot Green	Merino	21143	Green lam	251 SF	ASIS	172
2	Ink Blue	Merino	21032	Green lam	304 SF	ASIS	1027
3	Bubble Gum (pink)	Merino	21114	Green lam	173 SF	ASIS	1111
4	Saffron (orange)	Merino	21024	Green lam	217 SF	ASIS	1150
5	Cardinal Red	Merino	21065	Green lam	203 SF	ASIS	1114

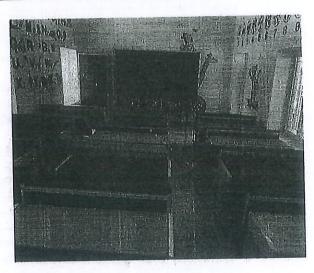
STRUCTURE POWDER COATING COLOUR-CODE-Ral-9010

(Make: AKZONobel/Nerolac/ Asian/ JOTUN)

Supply & delivery of finished item including cost and conveyance of all materials ,loading ,unloading, stacking at school site and fixing , inclusive of GST and all other Taxes etc., complete as applicable from time to time, and all other incidental charges etc., complete for finished item of work to the government schools in the state of Andhra Pradesh.

The item shall carry a warranty period of 5 (Five) years from the date of supply & fixing.





ZENITH METAPLAST PVT. LTD.

Authorized Signature of the firm/company

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Managing Director,
APEWIDC, Vijayawada

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	antity in	Annexure-A Description of Item	T	
	nbers		Rate	Amount i
	3821	Supply 9. Planing D. Land	per number	R
		Supply & Placing Dual TYPE-IV for class VIII to X and junior collage	10611	25,27,64,63
		(Multi Color)	10011	25,27,04,03
		The overall dimensions of desk will be W 1066mm x D 930mm x H 780mm (For table top). The seating bench height shall be 452 year.		
		be desk chall be 452 mm. The desk chall be manuf		
ν.		the specifications mentioned below:		
	1	L. Table top shall be made up of 18.0 mm thick plywood (tolerance as per IS 303) of MR Grade OSL (one side shall be laminated.		
		ASIS / Century,		
	2	Harrie Structure, Made of tech proce formand		
		of size 65mmx25.4mmx25.4mm and 1.2mm thickness and MIG Welded to rectangular pipe of 25.4 mm x 50.0 mm x 1.2mm thickness (890mm Bottom length) by using extra stiffeners of Coordina many 1.2mm thickness (890mm Bottom length)		
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		Sommix25,4mm X1,2mm Rectangular Dings		
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	3.			
1	3.	seat did back lest lidille structure. Made of CDCA	10 -725	
			Billion A	
-		section (each of length 1015.20mm) MIG welded to side frames at relevant locations. Square pipe of size 20.0 mm x 20.0 mm x 1.2 mm thickness and 100.0		
		mm long shall be welded to the frame to hold the horizontal supports. Raw		
		materials of MS tubes shall be from ESSAR / TATA / SAIL / JINDAL.		
	113			
	4.	MS Rectangular Pipe sections of dimensions 50.0 mm x 25.40 mm x 1,2 mm	in the second	
		The additional 2014 Hilli X 1.2 mm thickness shall be also also also also also also also also		
	5.	The same and an act the seal.		
	5.	Upper modesty panel and shelf shall be made of 0.8 mm thick CRCA sheet. The		
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	1.2			
			rus .	
		Stiffeners of MS pipe having sizes as 20.0 mm x 20.0 mm x 1.2 mm thickness. be provided in upper modesty panel. And shelf front fascia of upper modesty panel of desk shall have embossed design. The second street of the state of upper modesty panel of desk shall have embossed design.		
		welding) to avoid injury in case of accidental impact. The thickness of sheet of shelf		
		shall be 0,80mm. Front face of Upper Modesty panel should have ombosed it		
2	ZENITH	shall be 0.80mm. Front face of upper Modesty panel should have embossed letters of MADU NEDU 2021 as shown in drawing. Additional lower modesty panel baying size of the control of the c		
	16	Additional lower modesty panel having size H 150.0 mm x W 1015.20 mm X D 23.0	1	
	1 (7:5/1	1	

28 Managing Director, APEWIDC, Vijayawada

mm shall be made up of 0.8 mm thick CRCA sheet with designer square perforations. Stiffeners of MS pipe having size 20.0 mm x 20.0 mm x 1.2 mm thickness shall be fixed across the length at the bottom side of lower modesty panel.

7. Seat and back rest shall be made of 18mm thick plywood of MR Grade OSL (one side shall be laminated, and other side shall have balancer finish) except back rest.

Back rest shall have both sides colour lamination

Technical details of seat and back rest are mentioned below:

Seating bench dimensions shall be W 1066.0 mm X D 300.0 mm: Front side shall be rounded with post forming. Remaining three edges shall be sealed with 2mm thick PVC edge banding tape.

- 7.5 Back rest dimensions shall be W 1066.0 mm x D 250.0 mm: Upper side shall be rounded with post forming. Remaining three edges shall be sealed with 2mm thick PVC edge banding tape.
- 7.6 Seat and back rest shall be fitted to the frame with MAZAK self Tapping inserts (Make: ebco/HETTICH) of size M6 x 13mm.
- 7.3 Leg space between top and seat shall be 150mm.
- 8. Bag/bottle hooks shall be made of CRCA sheet. The overall size of hook shall be 135 mmx25.4mmx3mm, (80mm+23mm+32mm) It shall be welded on inner facia of both the vertical press-fitted steel sections.
- 9. The MIG / Spot welding shall be done as per technical requirement.
- 10. All metal components shall be powder coated in satin finish with pretreatment process. Powder coating shall be tested and certified on following parameters from NABL Accredited/ Government Laboratory, Valid certificates / test reports to be submitted along with the bid.
 - 10.1 Adhesion test: EN ISO 2409 (2 mm).
 - 10.2 Impact resistance test: ASTM D 2794 (5/9' ball) on applying 180 kg of impact load.
 - 10.21000 hrs. humidity test as per ISO 6270.
 - 10.7Salt spray (FOG) test: 1000 hours as per ASTM B 117.
 - 10.8 Cross Hatch Adhesion test as per ASTM: D3359.
 - 10.9 Conical Mandrel Test as per ASTM: D522.
 - 10.7 Scratch Test as per IS:101-1964 by applying 2 kg load.

Laminate Sheets Makes & Color codes:

SI. No	Luminate colour	Make	Shade/ Colour Code	Make	Shade/ Colour code	Make	Shade/ Colour code
1	Parrot Green	Merino	21143	Green lam	251 SF	ASIS	172
2	Ink Blue	Merino	21032	Green	304 SF	ASIS	1027
3	Bubble Gum (pink)	Merino	21114	Green lam	173 SF	ASIS	1111
4	Saffron (orange)	Merino	21024	Green lam	217 SF	ASIS	1150
5	Cardinal Red	Merino	21065	Green lam	203 SF	ASIS	1114

STRUCTURE POWDER COATING COLOUR-CODE-Ral-9010

ZEI (Make: AKZONobel/Nerolac/ Asian/ JOTUN)
Supply & delivery of finished item including cost and conveyance of all materials

Authorized Signature of the firm/company

017 129

Managing Director, APEWIDC, Vijayawada

,loading ,unloading, stacking at school site and fixing , inclusive of GST and all other Taxes etc., complete as applicable from time to time, and all other incidental charges etc., complete for finished item of work to the government schools in the state of Andhra Pradesh.

The item shall carry a warranty period of 5 (Five) years from the date of supply & fixing.





Grand Total for 1 to 4 items (including GST and all other Taxes etc.,)

Rs. 64,60,35,501/-

Rupees Sixty Four Crores Sixty Lakhs Thirty Five Thousand Five Hundred One Only

ZENITH METAPLAST PVT. LTD.

AUTHORISED SIGNATORY

Authorized Signature of the firm/company

30

Managing Director, APEWIDC, Vijayawada

x 12 4/29/04/22