

CANARA BANK, CIRCLE OFFICE, DELHI					
SCHEDULE FOR INTERIOR WORKS FOR CANARA BANK AT CBSE DWARKA SEC 23 BRANCH					
A	SCHEDULE - 'A' (FURNISHING WORK)				
S.NO.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT ( Rs.)
<b>1</b>	<b>SUSPENDED FALSE CEILING</b>				
<b>1.1</b>	<b>FALSE CEILING ( GYPSUM BAORD)</b>				
	Providing and fixing Gypsum false ceiling as per drawing including of providing and fixing G.I. Frame work shall comprise of 0.50 mm thick G.I. perimeter channel (MF-6A) having one flange of 19.6mm and other flange shall be of 29.6mm and a web of 26.6mm along with perimeter of ceiling, screw will to be fixed to the beam with the required curvature with nylon sleeves. screws will not at exceeding 610mm centers. Then suspending G.I. intermediate channel (MF-7) of size 45mm, 0.9mm thick with two flanges of 15mm each bent at the required curvature by cutting both its flanges. Suitable bracing to be provided where ever the flanges are cut with 0.9mm G.I. Flat and nuts and bolts at specific positions and thereafter at 1220mm centers with ceiling angle of width 25mm x 10mm x 0.50mm thick fixed to soffit with G.I. cleats and steel expansion fasteners as per specification of India gypsum at a distance of 2'0" c/c both ways complete with 12.5mm board and all necessary perimeter channels etc. The joints to be properly mended with paper tapes and gypsum compound all . The boards are to be jointed and finished which includes filling and finishing the tapered and square edges of the boards with jointing compound and fiber tape suitable for Gypsum board. A layer up to of 3.00mm thickness of Veneer Plaster is applied followed by two coats of topcoat (primer) at the face of board to give smooth seamless finish. 2 or more coats of plastic emulsion paint (roller finish) of approved shade and make shall be applied. The rate should include the full completion of the ceiling. At the time of handing over the site all necessary repairing work to be considered if required. The work will be completed as per instructions of the bank. No Drop or design(if any )will be considered as extra measurement it will be considered flat ceiling. (Only plan area to be measured for payment) .No extra payment will be made for the cutting of light points , stain glass,cove lighting etc. The measurement will be taken in one level , rate should include the drops also, and no extra amount will be paid for the drops.	Sq.Ft.	650		
<b>1.2</b>	<b>FALSE CEILING (ARMSTRONG CEILINGS – FINE FISSURED MICROLOOK EDGE WITH SILHOUETTE GRID (BLACK REVEAL)</b>				
	Providing and fixing false ceiling system manufactured by M/s Armstrong World Industries. Using hot dipped galvanized steel section, rotary stitched main tee of size 15mm x 42 mm web height having 0.36 mm gauge at every 600 mm centre to centre maximum and rotary stitched cross tee of size 15 mm x 42 mm having 0.33 mm gauge at every 600mm c/c and wall angle of size 19 x 19 mm having 0.35 mm gauge fixed to the periphery of the wall. The above grid is suspended at every 600mm c/c in both directions using 2.0 mm thick pre-straightened GI wire laying FINE FISSURED MICROLOOK WITH SILHOUETTE GRID(BLACK REVEAL) ceiling tiles manufactured by M/s Armstrong World Industries, of size 600mmx600mmx15mm having NRC 0.55 Light reflectance of >84% (WT), thermal conductivity k = 0.052-0.057 W/m0K, Humidity Resistance of 99% , having Fire Performance CLASS O / CLASS 1 (BS 476) the grid surface having 3 Fine Fissured coats of white. The back of formed grid tile should have filled with sand and polished with one layer protective paint. (Branch & ATM)	Sq.Ft.	700		
	<b>TOTAL OF SUSPENDED FALSE CEILING</b>				
<b>2</b>	<b>PARTITIONS WORK</b>				
<b>2.1</b>	<b>FULL HEIGHT SOLID PARTITION</b>	Sq.Ft.	120		
	Full height Solid Partition including flush door & strong room partition up to 7' only :- Providing and fixing solid partition the outer framing shall made out of aluminium hollow section of 65mm x 37mm size 1.0 mm thick of JINDAL / INDAL and Internal frame structure will placed at max distance of 2'-0" x 2'-0" center to center horizontally and vertically. Fix 12 mm thick MDF Board with 1.0mm thick laminate top on both sides with approved shade in groove pattern as per instructions of architect. The rate will include the cost of providing skirting of 100mm wide lined with 1mm thk laminate and providing & fixing a border at top of 100mm wide lined with 1mm thk laminate complete. Laminate Should be considered up to two or three color combination. The edge beadings with steam beach wood should be finished with melamine polish if required, frame work above false ceiling done shall not be measured but contractor may factor it while quoting there rates as measurement up to false ceiling lvl. The rate inclusive of providing & fixing of required flush door of 37mm thick approx. with 1.0mm th. laminate both side with steem beech wood chowkhat of size 75mm x 65mm approx and Item includes Heavy-duty SS ball bearing butt hinges 100 x 5.5 mm (4 Nos. per shutter) with screws etc.The shade of laminate finish to be got approved from Bank. . All as per the design and instructions of Bank.				
	Note :- For the purpose of payment partition shall be measured including the area of door/door frames up to false ceiling height.				
	Framework shall be regidly secured to floor, bottom of slab & existng walls at 2'-0" c/c with dash fasteners.				

2.2	<b>Partition with one side laminate &amp; other with Gypsum</b>	Sq.Ft.	0		
	As of the above but Providing and fixing double skin partition using aluminium frame as specified above along with 12mm thick Commercial Plywood Board lined on one side with 1mm thk laminate and other side lined with 6mm thick gypsum board of approved shade and make along with grooves.				
2.3	<b>Single skin partition above ceiling</b>	Sq.Ft.	0		
	As of the above but Providing and fixing single skin partition above false ceiling (where false ceiling is provided only on one side) for a height of up to 600mm or near about soffit of roof using aluminium frame as specified above along with 12mm thick Commercial Plywood Board lined on only one side with 1mm thk laminate of approved shade and make along with grooves.				
2.4	<b>Full Height Partially Glazed partition (BM Cabin &amp; Cash Cabin upto 7' Height)</b>	Sq.Ft.	380		
	Same as of Solid ht partition , providing 8mm thick Modi/saint Gobin float glass above 1'-0" / 3'-0" & up to 7'-0" fixed with steam beech wood beading of finished size 1 1/2" X 1" all along the edge. All edge-to-edge glass joint to be machine cut and polished and sealed with silicon sealant. Joint shall be located strictly as shown in the drawing. All exposed woodwork to be malamine polished. Item includes frosted/striped/designer glass film of 3m, Avery Dennison or equivalent ( basic rate of Film Rs. 50/ Sq.ft. ) on existing glass as per manufacturer's specifications. All as per the design and instruction of Bank.				
2.5	<b>Low. Height Semi Glazed Partition</b>	Sq.Ft.	84		
	Same as above but of Low height as per design including 10mm Toughened glass with edges polished to be used. All other specs are same as of above, Edges of the partition to be covered with 3" X 1.5" Steam beech wood duly malamine polished moulding. 38mm thick flush door: wicket gate also shall be included for a measurement. All as per the design and insturction bank.				
2.6	<b>Glazed Partition(Counter Front Glass)</b>	Sq.Ft.	46		
	Providing & fixing 10mm thick toughened clear float glass to shape for front side of the cash counters including cutting the holes and providing & fixing TW beading polished and tinted to approved shade. ( including SWO/Chief Cashier front Glass).				
2.7	<b>ACP WALL PANELLING - ATM , ENTRANCE OF BRANCH/ATM INCLUDING SHUTTER BOXING</b>				
	Providing & fixing in position ACP (Aluminium Composite Panel) with framing of Aluminium Tube sections of min 1.5"x 1" and 20 gauge 2'-0" C/C both ways. ACP to be in 2' wide panels or distributed equally. Panels to be fixed to the frame with 3M or equi-valent adhesive. Joints to be finished with Silicon based sealant. Minimum ACP thickness-3 mm. Aluminum foil thickness to be min 0.25 mm on both sides. Alubond, Eurobond, Fujibond, Alcobond or equivalent ISO certified or approved brands to be used. White (IVORY) & Blue to be as per bank's approval. Additional Sections to be provided to fix the Indoor AC units. Both AC units to be installed near the machine area at the highest position. The rate shall be included for providing proper access panel for ATM power point and shall have proper locking arrangement for plug point by provding additional framing. ( The measurement shall be made up to falseceiling).	SQ.FT	410.00		
<b>TOTAL OF PARTITIONS WORK</b>					
3	<b>DOOR &amp; ACCESSORIES</b>				
3.1	<b>Main Entrance Door PT Door- Branch/ATM</b>	Sq.Ft.	76		
	Providing and fixing toughend glass door shutters of 12mm thickness in opening of glazed partitions with stainless steel patch fittings of approved make ( DORMA/ DLINE / GEZE or approved equivalent) including heavy duty double action floor-spring with steel cover plate of approved make, pull handle SS brussed finishes 24" long thick 25mm on both sides of door shutters, locking arrangement of Dorma / D Line or equivalent or better quality as approved by Engineer-in-charge. Exposed edges of glass shall be machine cut & polished. Cost includes cutting and making good the floor, walls, ceiling etc. for fixing floor spring and patch fittings. All complete as per approval of the Architect.				
3.2	<b>Main Entrance Fixed PT Glazing-Branch/ATM</b>	Sq.Ft.	154		
	Providing and fixing toughend glass partition of 12mm thickness with stainless steel patch fittings of approved make ( DORMA/ DLINE / GEZE or approved equivalent as approved by Engineer-in-charge. Exposed edges of glass shall be machine cut & polished. Cost includes cutting and making the floor, walls, ceiling etc. good for fixing patch fittings. All complete as per approval of the Architect.				
3.3	Supplying and fixing of Dorma/GEZE Dline / Hardwyn/Godrej or approved equivalent Door Closer for wooden door for Branch manager, Banking hall, Chief Cashier.	Nos	6		
3.4	Supplying and fixing of mortice door lock of hardwyn make HML-480 Lock Body 304 Stainless Steel. (in BM Cabin , Store room . Cash cabin shall be Godrej Night latch (atm 1 No.)	Nos	6		
3.5	Supplying and fixing of door stopper SS Grade 304, HESSF-2C hardwyn make.	Nos	6		
<b>TOTAL OF DOOR &amp; ACCESSORIES</b>					

<b>4</b>	<b>WORKING COUNTER</b>				
<b>4.1</b>	<b>CASH/STAFF COUNTERS</b>	<b>Rft.</b>	<b>5.0</b>		
	Providing and fixing Chief Cash Counter in split-levels @ 2'-6" (height 750mm) & 18" (1140mm) with 2'-6" & 15" wide each respectively. Each Upper and Lower tier shall be made of 19 mm thick Commercial Plywood Board finished in 1.0mm thick laminate. Exposed edge having steam beech wood edging of size 1 1/2" x 1". Vertical face shall have 19mm thick Commercial Plywood Board over pine wood framework as per requirement of design. All exposed surfaces shall be finished with 1.0mm thick laminate of approved shade and colour.				
	1 no. prefabricated metal computer key board tray including drawer slides 12.5" x 22" tray with 14" telescopic slides including L - brackets for securing to the table top. Chest of drawers (size 1'-4" x 2'-0" x 2'-5") made of 19mm thick Commercial Plywood Board having three drawers finished with 1.0mm thick Laminate on all sides. Each drawer shall have locking system and 6" long S.S. brushed finished handle, drawer slides etc. of approved make. All exposed edges of Commercial Plywood Board sealed with Steam beech wood beading of size 1/4" x 3/4". All beading and exposed wood shall be melamine polished and non-laminate surface to be enamel painted. Item includes readymade metal powder coated CPU trolley, grommet, footrest for each seat. All complete as per approval and instructions of the Architect / employer. The rate also include providing and fixing painting a foot rest using hard wood 100 x 25mm size 1st class seasoned country frame. Payment will be made only on the centerline measurement. The rate shall include the cost of providing skirting of 100mm wide lined with 1.0mm thk laminate and providing & fixing a border at top of 100mm				
<b>4.2</b>	<b>RUNNING COUNTER</b>	<b>Rft.</b>	<b>5</b>		
	Providing and fixing staff counter/SWO levels @ 2'-6" (750 mm) & 9" wide each respectively and shall be made of 19mm thick Commercial Plywood Board and finished in 1.0mm thick laminate. Working top having steam beech wood edging of size 1 1/2" x 1". Vertical face shall have 19 mm thick Commercial Plywood Board pine wood framework as per requirement of design. All exposed edges of Commercial Plywood Board sealed with Steam beech wood beading of size 1/4" x 3/4". All exposed surfaces shall be finished with 1.0mm thick laminate of approved shade.				
	The item includes Chest of drawers (size 1'-4" x 2'-0" x 2'-5") made of 19mm thick Commercial Plywood Board having One drawers at top and a storage cabinet below having shutters of 19mm thick Commercial Plywood Board finished with 1.0mm thick Laminate on all sides. 1 no. prefabricated metal computer key board tray including drawer slides 12.5" x 22" tray with 14" telescopic slides including L - brackets for securing to the table top for each seat. All beading and exposed wood shall be melamine polished and non-laminate surface to be enamel painted. Item includes readymade metal powder coated CPU trolley, grommet, foot rest for each seat. All complete as per approval and instructions of the Architect/employer. The rate also include providing and fixing painting a foot rest using hard wood 100 x 25mm size 1st class seasoned country frame. Payment will be made only on the centerline measurement. The rate shall include the cost of providing skirting of 100mm wide lined with 1.0mm thk laminate and providing & fixing a border at top of 100mm wide lined with 1.0mm thk laminate complete.				
	<b>TOTAL OF WORKING COUNTER</b>				
<b>5</b>	<b>TABLE &amp; FURNITURE</b>				
<b>5.1</b>	<b>MANAGER TABLE ( Size:- 5'-6" x 2'-6") ht. 2'-6"</b>	<b>Nos</b>	<b>1</b>		
	Providing and fixing tables made out of 19 mm thick Commercial Plywood Board hard wood frame work finished with 1.0mm thick laminate of approved shade. Top having steam beech wood edging of size 2" x 1 3/4" finished with 19mm thk Comm. Commercial Plywood Board of approved make cladded with 1mm thk. laminate (color with vertical grain) as per design in all visible areas. All the exposed edges to be covered with wooden steam beech lippings and mouldings duly malamine polish. The drawers to be made out of 19mm thk Commercial Plywood Board with 1.0 mm laminate finish in the front , and bottom to be made out of 6mm Commercial Plywood Board and it should play in drawer sliding telescopic channels. The inside of the drawer to be duly paint & Table back side wil be 1mm laminate. A leg rest to be provided duly polished made out of 3"x2" Wooden Section. A shutter to be made by 19mm Commercial Plywood Board cladded with 1.0mm laminate .The necessary locks handles to be provided in each drawers and shutters. 3" x 1/2" wooden skirting to be provided in all visible areas duly polished. The necessary wire managers(SS) to be provided on the tables and provision for lights to be kept if required in the front of the table. All the exposed areas to be duly malamine polished. The work to be completed as per design and approval of the Bank. The table should have key board tray and CPU Trolley and 8 mm Glass top to be Modular. All as per the design and instructions of Bank .				

5.2	<b>OFFICER TABLE ( Size:- 5'-0" x 2'-6" ) ht. 2'-6"</b>	Nos	3		
	Providing and fixing tables made out of 19 mm thick Commercial Plywood Board hard wood frame work finished with 1.0 mm thick laminate of approved shade. Top having steam beech wood edging of size 2" x 1 3/4" finished with 19mm thk Comm.Commercial Plywood Board of approved make cladded with 1mm thk. laminate( color with vertical grain) as per design in all visible areas. All the exposed edges to be covered with wooden steam beech lippings and mouldings duly malamine polish. The drawers to be made out of 19mm thk Commercial Plywood Board with 1.0 mm laminate finish in the front , and bottom to be made out of 6mm Commercial Plywood Board and it should play in drawer sliding telescopic channels. The inside of the drawer to be duly paint & Table back side will be 1mm laminate. A leg rest to be provided duly polished made out of 3"x2" Wooden Section. A shutter to be made by 19mm Commercial Plywood Board cladded with 1.0mm laminate .The necessary locks handles to be provided in each drawers and shutters. 3" x 1/2" wooden skirting to be provided in all visible areas duly polished. The necessary wire managers(SS) to be provided on the tables and provision for lights to				
5.3	<b>SERVER TABLEE ( 2'-0" WIDE )</b>	Rft.	0		
	Providing and fixing of Utility//Server Counter 2'-0" wide top made up of 19mm thick commercial pasted on 1.0 mm thk. laminate. The Top of table will be finish with 1.00 thk laminate.all hardware fittings fixtures etc. The drawers to be made out of 19mm thk board with 1.0 mm laminate finish in the front ,sides to be made out of 12mm Commercial Plywood Board and bottom to be made out of 6mm Commercial Plywood Board and it should play in drawer sliding telescopic channels. The inside of the drawer to be duly paint. All exposed edges to have wooden lipping stained to match the desk and melamine finished.Design and detail of the table shall be as per design. (As per Site, Designing of Table and specification may be Changed). The works to include a keyboard try and CPU trolly to be modular. All as per the design and instructions Bank. (S.S. Finish Lock & Handle to be included )				
5.4	<b>Round Table For meeting Room:</b> Providing and fixing Round Table having dia of 4 ft as per design and height of 3 ft made out 19mm comm. board with necessary grove patterns with 1.0mm laminate. 10mm thk machine polished glass to be provided on top of the writing tables	NO	0		
<b>TOTAL OF TABLE &amp; FURNITURE</b>					
6	<b>STORAGE &amp; SIDE UNIT</b>				
6.1	<b>Side and Back Unit</b>				
	Providing and fixing Side Unit/ Back unit 450 mm depth made out of 19mm Commercial Plywood Board finished with 1.0mm laminate in all exposed areas . The drawers to be made out of 19mm Commercial Plywood Board and cladded with 1.0mm laminate and bottom made out of 6mm comm Commercial Plywood Board duly painted in matching tone and it should play on drawer sliding channels. The shutters to be made out of 19mm Commercial Plywood Board and should play on drawer sliding castors on powder coated channels. The necessary locks , handles, etc to be provided. 3" x1/2 wooden skirting to be provided duly polished as per matching tone all along the visible areas. Inside of the unit to be enamel painted in matching tone. All the exposed edges of the boards/Commercial Plywood Board woods to be coverd with woden lippings/mouldings duly polished all complete. The work to be completed as per approval and specification of the Architect.	Sq.Ft.	48		
6.2	<b>LOW HT cabinet UNIT</b>				
	Providing and fixing Full /Low height Cabinet 450mm deep made out of 19mm thk Commercial Plywood Board finished with 1.0mm laminate in all exposed areas. The Shutter to be made out of 19mm Commercial Plywood Board in the front cladded with 1.0mm laminate (color, vertical grain) and bottom made out of 6mm Commercial Plywood Board duly painted in matching tone and shelves 19mm thk comm Commercial Plywood Board to fixed inside storage. The shutters to be made out of 19mm Commercial Plywood Board . The necessary locks , handles, etc to be provided. 3" x1/2 wooden skirting to be provided duly polished as per matching tone all along the visible areas. Inside of the unit to be enamel paint finish. All the exposed edeges of the boards to be covered with wooden lippings/mouldings duly polished all complete. All as per the design and instructions Bank.				
	<b>750mm High</b>	Sq.Ft.	160		
	<b>1200mm High</b>	Sq.Ft.	0		
	<b>2400mm High</b>	Sq.Ft.	0		
6.3	<b>Main Electrical Panel Cabinet</b>	Sq.Ft.	36		
	Providing and fixing of DB Shuttering formed of 12mm thk Commercial Plywood Board wood on 12mm thick Gypsum board (fire Proof) with finsh as per Item no 1 for inside and out side shutters finished with laminate on outer surface with SS (4Nos) louvre perforation and necessary hardware, hinges etc complete as per details. All as per the design and instructions Bank.				
<b>TOTAL OF STORAGE &amp; SIDE UNIT</b>					

7	<b>OTHER MISCELLANEOUS ITEMS</b>				
7.1	<b>PIN UP / NOTICE BOARD</b>				
	Providing and fixing soft board with necessary framework with 12mm BWR Commercial Plywood Board on top 12 jolly board to be fixed finished with fabric @Rs80 , with necessary mouldings duly polished along the periferi. All as per the design and instructions Bank.	Sq.Ft.	84		
7.2	<b>CENTRE TABLE(3 ftx2 ftx1.5 ft)</b>	Sq.Ft.	1		
	Providing and making centre table of above mentioned size and as per drg. Table top shall consist of 12 mm thk Float Glass with Champered edge with approved quality etching. The base shall be made up of CP Teak wood frame/19mm thk. Marine ply as Directed by Architect/bank. All exposed faces finished with natural polish (If wooden frames are used0or with 1.0mm thick laminate forr ply. All inner face will be finished wityh natural french polish.				
7.3	<b>DRESSING TABLE FOR STRONG ROOM</b>	Sq.Ft.	1		
	Dressing table of size 600mmx450mmx600mm made up of 12 mm thck BWR ply on top and vertical support finished with 1 mm laminate of approved shade and brand with 5 mm thick frame less mirror of size 1200mmx4500mm fixed to wall with SS Studs as per Design and direction of Architect/bank. The table shall have openagle shutter with horizontal shelves in bottom.				
7.4	<b>WRITING LEDGER</b>	NO	1		
	Providing and fixing writing ledger as per design minium 5 ft length made out 19mm comm. board with necessary grove patterns with 1.0mm laminate. 10mm thk machine polished glass to be provided on top of the writing ledger				
7.5	<b>CHEQUE &amp; SUGGESTION BOX</b>	NO	2		
	Small boxes to be made out of 12mm comm. Commercial Plywood Board along with writing ledge finished with 1.0 mm laminate, inside enamel painted and rate should be included providing fixing of sugestion box & Cheque deposit box as per approval of bank. The work to be completed as per design and approval of the architect.				
7.6	<b>OUTER SHUTTER BOXING</b>	Sq.Ft.	0		
	Overhead outside shutter box: p/f sal wood frame fixing of 12mm Commercial Plywood Board with 1mm thk Laminate finish and openable shutter for out side area inside shall be 2 coat enamel paint with primer				
7.7	<b>BANKING HALL AND PILLAR : WOODEN PANELLING</b>				
	Fabricating and fixing wall/column panelling, the framing shall made out of aluminium hollow section of 65mm x 37mm size 1.0mm thick of JINDAL / INDAL at spacing not exceeding 600mm bothways (horizontal and vertical). Panelling framework to be secured to wall surface/column surface.Panelling framework to be clad on one side with 7.5 mm thick MDF Board finished with 1.0mm thk laminate including skirting of 100mm high & 12mm x 12mm groove at skirting level. All as per the design and instructions Bank.				
	COLUMNS, MGR CABIN, BANKING HALL etc	Sq.Ft.	1020		
7.8	<b>VINYL FLOORING</b>	Sq.Ft.	0		
	Supplying & laying of approved brand of scratch proof, semi flexible P.V.C. blended homogeneous marble Vinyl flooring in tiles conforming to IS:3461, fixing with synthetic acrylic adhesive after preparing the floor, levelling & smothaning when necessary with suitable putty, as per the design & instruction of the Engineer-incharge. 2 mm thick. Make Solar Bright, Solutia or equivalent.				
7.9	<b>Flap Door</b> (3.5' x 4.5') made of 19mm BWP with UGM Frosty White and exposed edges with teakwood beading (Maelamine polish) on two edges with latch and other accessories (hinges , Handle etc)	No	1		
8	<b>ROLLER BLINDS</b>	Sq.Ft.	84		
	Providing and fixing Roller blinds of approved design and shade by the Architect,incl all std fittings as per manufacturer's specification. The work to be completed as per specification and approval of the architect. (approved brand Vista, Hunter Dogulus)				
8.1	<b>CEMENT PLASTER (IN COARSE SAND)</b>				
	INTERNAL PLASTER - CEMENT PLASTER (IN FINE SAND)				
	20 mm cement plaster of mix :				
	1:4 (1 cement: 4 fine sand)	SQM	180		
8.2	<b>PLASTIC EMULSION</b>				
	Providing & applying plastic emulsion paint on walls, columns & ceilings. The rate shall include scrapping, levelling & preparing the surface. Primer coat + (minimum) 3 coats to get evenly spread quality finish (roller finish) of approved make, quality & finish shall be provided.	SQM	180		
8.3	<b>SYNTHETIC ENAMEL PAINTING:</b>				
	Painting with synthetic enamel paint of approved brand and				
	Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture	SQM	20		
8.4	<b>POP</b>				

