

# DRAFTING

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## Bow Compasses

Alvin

### Introductory 6" Bow Compass

Rugged pencil/divider with center wheel adjustment. For circles 1/8" to 9-1/2".

Stk. **196632** Mfg. 201 ..... \$ 7.29



### Academic Bow Pencil Compass

4-3/4" hoop spring pencil compass with fast center wheel adjustment. For circles up to 4".

Stk. **196640** Mfg. 844B..... \$ 14.40



## Combination Bow Compasses



196139



196190



196193

Fiberglass ringhead and pivot design for smooth, firm adjustment. Center wheel adjusts quickly and easily for circles up to 10". Built-in spindle stop prevents overextension. Tarnish-free nickel finish.

**6" Pencil Compass/Divider.** Includes extra lead, needle point & T-bolt. Stk. **196139** Mfg. 504 ..... \$ 12.60

**Basic 6" Bow Combination Compass.** Includes same as above, plus split leg design accepts pen, pencil & divider parts & slip handle for spare ruling pen. Stk. **196190** Mfg. 505 ..... \$ 20.50

**Basic 6" Bow Combination Compass w/Beam Bar.** Includes same as 505, plus beam bar extension for circles up to 20" dia. Stk. **196193** Mfg. 505V ..... \$ 26.30

For a free copy of our full-line Drafting Catalog, call 800-831-5904.

## Bow Compasses, cont.

Alvin, cont.

### 6" Master Bow Combination Compass

Rugged gearhead design and interchangeable pencil and divider parts. Rapid adjustment feature allows 1/8" to 11-1/2" circles.

- Easy-hold handle for comfortable adjustments
- Double break leg for precise perpendicular drawing

Includes extra lead & bolt, hinged plastic case. Stk. **196171** Mfg. 805..... \$ 21.80



## Drawing Instrument Sets

Alvin

### Compact Drawing Set

6" bow pencil compass and 6" friction divider. Fiberglass ringhead and pivot design for smooth, firm adjustment. Accurate center wheel adjusts easily for up to 9" dia. Capped spindle prevents overextension.

Includes compass, divider w/replaceable needle points, case. Stk. **196164** Mfg. 608K..... \$ 19.30



### 8-Piece Drawing Set

5-1/2" bow compass with slit leg for pencil, pen and divider parts. Durable matte nickel construction with black fiberglass crown and reinforcements.

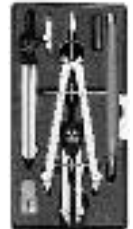
Includes lead pointer, 5-1/2" divider, ruling pen, slip handle, eraser & case.

Stk. **196040** Mfg. 553G..... \$ 19.70

### Maverick Bow Compass Drawing Set

Two bow compass sizes for pencil drafting. 6" compass with center wheel and straight leg design. 4" compass with center wheel design. 5-1/2" gearhead divider with adjustable needle points. 5-3/4" mechanical pencil.

Includes 2 compasses, divider w/replaceable needle points, mechanical pencil & case. Stk. **196642** Mfg. 895E..... \$ 40.20



### Jet Bow Beam Combination Drawing Set

Tools for circles up to 28" dia. 6" speed compass. 4-1/2" bow compass. 6" beam bar and slide coupling. 6" friction divider with self-centering gearhead. Mechanical lead holder, slip handle for spare ruling pen. Finger grip lead pointer. Center tack and screwdriver.

Includes 2 compasses w/interchangeable pen, pencil & dividers, divider w/replaceable needle points, mechanical pencil & case. Stk. **196645** Mfg. 929JS..... \$ 62.40

**Basic Bow Repair Kit.** A cross section of repair & replacement parts for all basic bow drawing instruments. Sturdy case.

Stk. **196310** Mfg. 900D..... \$ 41.60



DRAFTING



## Beam Compass Set

**Alvin** Efficient spring-loaded friction-control design enables precision drawing. The two 13" beam bars with coupling accommodate circles up to 48".



**Includes** interchangeable ruling pen, pencil, divider legs & velvet-lined case w/clear cover.

Stk. **196646** Mfg. 961B ..... \$ **35.30**

**Compass Lead Refills.** For standard drawing instruments w/presharpened chisel points.

Stk.	Mfg.	Price/Gross (144)	Stk.	Mfg.	Price/Dz.
◆ PLEASE NOTE there are 2 columns, each with its own Stk., Mfg. & Price.					
<b>196319</b>	5144-HB.....	<b>\$ 8.31</b>	<b>196312</b>	5112-H.....	<b>\$ 2.31</b>
<b>196320</b>	5144-2H.....	<b>8.31</b>	<b>196313</b>	5112-HB.....	<b>2.31</b>
			<b>196314</b>	5112-2H.....	<b>2.31</b>
			<b>196315</b>	5112-4H.....	<b>2.31</b>

## Friction Divider

**Alvin** 6" friction divider with self-centering gearhead design. Replaceable needle points. Tarnish-free nickel finish.



Stk. **196145** Mfg. 660..... \$ **8.98**

## Pantograph

**Alvin** Accurate instrument designed for use on inclined or horizontal boards and for tracing or dotting. Sturdy joint and arm construction ensures accuracy.



Bars are seasoned hardwood with clear gray lacquer finish and have die-sunk graduations, with holes carefully drilled for accuracy. Adjustable nylon ratio thumbscrews for smooth, easy movement.

- Nickered lead holder attachment & nylon tracer point
- Nickered anchor table clamps provide stability

Stk. **196141** Mfg. PA306..... \$ **28.60**

## Carrying Cases

**Alvin**

### Briefcase Portfolio

Get organized with this durable briefcase style portfolio. Made of strong, electrically bonded vinyl with snag-proof vinyl zipper track. Great for custom drawing kits and classroom use. Blue with clear front.



Stk. **196262** Mfg. BKC..... 12" x 16" \$ **4.31**

### Expanding Folders

For student or office use. Handy expanding wallets are ideal for carrying loose notes, papers, books and etc. Made of 1-piece heavyweight red fiber. Velcro closure permits closing the wallet whether it is flat or full. Full 2" expansion.



Stk. **196116** Mfg. E18..... 12" x 18" \$ **3.36**  
Stk. **196121** Mfg. E20..... 14" x 20" \$ **5.93**

## Drawing Kits, Sets & Systems

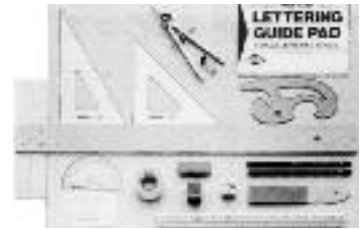
**Alvin**

### Drawing Kit

Fits the needs of architectural, engineering and mechanical drawing.

**Includes**

- 6" bow pencil compass/divider
- 24" transparent-edge T-square
- 8" 45°/90° triangle
- 10" 30°/60° triangle
- 18" x 24" drawing board w/metal edges
- 12" architect's triangular scale
- sandpaper pointer pad
- 12-1/2" irregular curve
- art gum eraser
- 3/4" x 10-yard roll of drafting tape
- 2H & 4H pencils
- 6" semicircular protractor
- sharpener
- erasing shield
- soft pencil eraser
- freehand lettering guide pad



Stk. **196143** Mfg. SD505..... \$ **82.50**

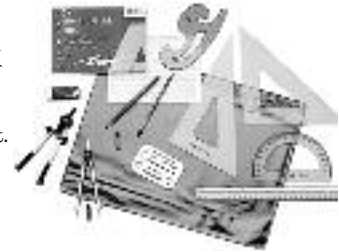
### Beginner's Drawing Kit

Kit eliminates student guess work, saves time and allows work with consistent equipment.



**Includes**

- 6" bow compass w/parts tube
- 5-1/2" plain divider w/replaceable needle points
- architect's open divided triangular scale
- 8" 45°/90° clear plastic triangle
- freehand lettering guide pad
- 10" 30°/60° clear plastic triangle
- mechanical lead holder
- 12" x 16" vinyl carrying case
- 8-1/2" irregular curve
- 6" semicircular protractor
- pencil eraser, erasing shield
- mini lead pointer
- tube of compass leads



Stk. **196270** Mfg. BDK-1A..... \$ **35.00**

### Technical-grade Blueprint Kit

Designed to fit average needs, budget and class level requirements.

**Includes**

- 6" bow compass w/parts tube
- architect's divided triangular scale
- 10" 30°/60° clear plastic triangle
- 8" 45°/90° clear plastic triangle
- freehand lettering guide pad
- 6" semicircular protractor
- mechanical lead holder
- tube of compass leads
- mini lead pointer
- pencil eraser
- erasing shield
- 8-1/2" irregular curve
- 12" x 16" vinyl carrying case



Stk. **196271** Mfg. BRK-1A..... \$ **37.90**

### Ames Draft-Pak Portable Drafting Systems

Self-contained unit includes drawing board with parallel blade, tilting mechanism and storage area. Easily converts to a briefcase with carrying handle and cabinet hardware.



- Tilts for accurate table slope
- Sectioned storage compartment
- Reversible drafting surface safely stores parallel blade inside case & allows drawing to be left in place when unit is closed
- Cord mechanism keeping blade parallel is enclosed for trouble-free operation; device connecting blade & cord allows easy adjustment
- Acrylic parallel blade for highest clarity & dimensional stability

Stk. **196217** Mfg. 1218C..... for 12" x 18" paper \$ **108.00**  
Stk. **196273** Mfg. 1824C..... for 18" x 24" paper \$ **127.00**

## Drafting Machines

### Chalkboard Drafting Machines

**Vemco** Useful in the classroom for drafting and geometric instruction, these machines are built to the same standards as Vemco's regular drafting machines. 24" wooden scale with scaled inches on 1 side and metric on the other.



Stk.	Mfg.	Board Coverage	Price
957530	4296-402	42" x 96"	\$ 1,404.00
957535	4896-402	48" x 96"	1,433.00

### Drafting Machines & Scales



shown w/Drafting Machine Scales, sold separately

#### V-Track® Drafting Machines

**Vemco** Accurate and feature-packed drafting/layout machine includes a 32" x 42" board.

- **Easy-to-read protractor** is divided to single degrees
  - double 5-min. vernier permits angular accuracy to 1/12°
  - number is 0-90° in quadrants, numerals always perpendicular to any baseline
- **Double pivot joint design** compensates for lateral board warpage
  - locates 1 pivot joint at center of protractor head to provide increased board coverage
  - open design permits greater visibility of protractor
- **Vertical brake** controls movement of protractor & is Vemco-patented feature that puts user in control at all times w/choice of on, off or touch & go
- **Precision tracking** is possible w/Vemco's V-Track design using tapered Delrin® wheels which allow smooth, precise movement at any board angle
  - release of screws on vertical track allows user to "shorten" track for use on smaller size boards
- **Horizontal brake** allows touch & go control just like vertical brake
- **12" horizontal carriage** gives greater rigidity of vertical track
  - 10 sealed precision ball bearings in carriage assemblies counter balance pulleys
  - spring-loaded wheels in carriages automatically compensate for any possible wear & assure absolute repeatability
- **Horizontal clamps** move along entire track & attach in seconds
- **Support roller** adjusts along entire vertical track to compensate for varying board depths, roller adjusts height of vertical track

Stk.	Mfg.	Arm L.	Hand Usage Style	Price
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#### V-Track Drafting Machines

957309	3242-725RH	—	right.....	\$ 1,059.00
957308	3242-725LH	—	left.....	1,059.00

**V-Track Drafting Scales.** Antiflex scales feature an aluminum center core & clear acrylic edge.

949608	AP-2/12"	12"	right.....	\$ 57.80
949675	AP-2/18"	18"	right.....	64.60
949609	AP-2R/12"	12"	left.....	\$ 57.80
949676	AP-2R/18"	18"	left.....	64.60

#### You may also need:

Chairs & Stools.....	71
Flat Storage Cabinets.....	60
Erasers.....	91
Mechanical Pencils.....	90

shown w/Drafting Machine Scales, sold separately

### Model 3500 Drafting Machine

**Vemco** Built with slightly smaller dimensions than many drafting machines, the Model 3500 will perform tasks and meet drawing size requirements of larger, more expensive machines. Vemco detail drafters are quality designed and manufactured.



- Single row of figures on protractor by quadrants
- Double vernier reads to 5 min.
- 3-3/4" dia. protractor
- Machine-divided to 1°

Stk.	Mfg.	Arm L.	Board Coverage	Price
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#### Right-hand Machines

957523	3500-116	16"	24" x 36"	\$ 591.00
957525	3500-118	18"	28" x 40"	594.00
957527	3500-120	20"	34" x 44"	598.00
957529	3500-122	22"	38" x 50"	601.00

#### Left-hand Machines

957522	3500-116L	16"	24" x 36"	\$ 591.00
957524	3500-118L	18"	28" x 40"	594.00
957526	3500-120L	20"	34" x 44"	598.00
957528	3500-122L	22"	38" x 50"	601.00

### Made of Transparent Plastic Drafting Machine Scales

**Vemco** Acrylic scales offer a clear view of the drawing beneath. Graduations and numbers are on the underside of the scale to eliminate parallax distortion. A raised rib protects graduations and prevents capillary action when inking.



Stk.	Mfg.	Full Sz. Graduations	Half Sz. Graduations	Price
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#### 12" Drafting Machine Scales

951015	P-2/12"	1/16"	1/16"	\$ 51.00
951417	P-3/12"	1/32"	1/16", 1/4" to 1/8"	51.00
952824	P-34/12"	1/4" = 1'	1/8" = 1'	51.00
954499	P-35/12"	1/8" & 1/4" = 1'	1/2" & 1" = 1'	51.00
954164	P-41/12"	1:1 to 1mm	1:2 to 1mm	51.00
955437	P-70/12"	non-graduated.....		44.20

#### 18" Drafting Machine Scales

951082	P-2/18"	1/16"	1/16", 1/4" to 1/8"	\$ 54.40
951484	P-3/18"	1/32"	1/16", 1/4" to 1/8"	54.40
952891	P-34/18"	1/4" = 1'	1/8" = 1'	54.40
954566	P-35/18"	1/8" & 1/4" = 1'	1/2" & 1" = 1'	54.40
954231	P-41/18"	1:1 to 1mm	1:2 to 1mm	54.40
955504	P-70/18"	non-graduated.....		47.60


### Drawing Boards & Covers



#### Portable Sketch Boards

**Alvin** Made of strong, tempered masonite with cutout carry handle. Includes metal clip and rubber band to hold paper securely in place.

Stk.	Mfg.	Board Size	Price
196471	SBI516	15-1/2" x 16-1/2"	\$ 7.61
196474	SBI819	18-1/2" x 19-1/2"	8.80

Please turn the page to find  Parallel Straightedge White Boards & More!



## Drawing Boards & Covers, cont.

A Studio-quality Surface in a Small, Portable Unit

### Parallel Straightedge White Boards

**Alvin** Rugged, warp-free white Melamine® laminate offers a smooth clean drawing surface anywhere you work. Brushed aluminum finish on the straightedge enhances appearance and provides a stain-resistant pressure point.

Each board is equipped with spring-loaded hardware to accommodate paper, vellum or cardboard. Tractor feet for easy set-up on any flat surface. Raised reinforcing bar serves as convenient pencil ledge. Parallel straightedge eliminates the need for T-squares. Smooth-action pulley moves easily, yet is precise.

- Durable space-age plastic legs for greater stability, increased height
- Straightedge locking system provides a "brake" for drawing straight lines w/greater confidence and ease
- Rugged Melamine® lamination prevents warping & wipes clean w/damp cloth
- Precision optical-grade acrylic straightedge eliminates the need for a T-square, provides a strain-resistant pressure point & is undercut for use w/technical pens
- Molded plastic tuck-away comfort-fit carrying handle
- Non-slip, "Grip-Track" tractor feet overhang the table edge & hold the board at the perfect drawing angle
- All hardware is nickel-plated to resist stains & tarnishing

Stk.	Mfg.	Board Size	Price
196207	PXB21	16" x 21"	\$ 68.40
196208	PXB24	18" x 24"	74.60
196209	PXB26	20" x 26"	76.70

**Parallel Straightedge Replacement Knobs.** Black, 6/pkg.  
Stk. 196045 Mfg. KN6 ..... fits all PXB board sizes \$ 7.38

### Drawing Boards

**Alvin** Solid core construction.

Stk.	Mfg.	Board Size	Price
<b>Natural Wood Surface.</b> T-metal edges.			
196147	DB112	16" x 21"	\$ 19.20
196150	DB114	18" x 24"	23.70
196151	DB116	20" x 26"	28.80
<b>White Melamine® Surface.</b> Black PVC edges.			
196658	XB112	16" x 21"	\$ 19.90
196659	XB114	18" x 24"	24.00
196660	XB116	20" x 26"	28.60

### Board Covers

**Alvin** Durable 5-ply VBC plastic protects heavily-used surfaces against mars, scars, cuts and dents. Pre-cut sheets feature a green side with the other side being cream.

Stk.	Mfg.	Size	Price
196478	VBC44-1	18" x 24"	\$ 18.10
196479	VBC44-2	20" x 26"	20.00
196480	VBC44-3	23" x 31"	24.40
196481	VBC44-4	24" x 36"	27.40
196482	VBC44-5	31" x 42"	35.50
196483	VBC44-6	36" x 48"	45.10
196472	VBC44/36	10 yd. x 36"	277.00
196473	VBC44/48	10 yd. x 48"	358.00



## Porta-Trace® Light Box

**Alvin** Great for drawing, tracing, embossing, calligraphy, viewing and presentations. Durable unit features a tough stainless steel frame and thick Plexiglas top. Color-corrected lamps with bright, even light without hot spots. 3-20W lamp. UL listed.  
Stk. 196023 Mfg. PT1824-3..... 18" x 24" glass \$ 470.00



## Drawing Board Storage Cabinet

**Shain** Maple plywood cabinet offers ample horizontal storage space for 25 (20" x 26") drafting boards and T-squares. Masonite dividers. Locking doors. Earth-friendly, water-based finish.

Overall size 32"W x 22"D x 84"H.  
Stk. 155531 Mfg. DBC-1 ..... \$ 1,534.00



## Straightedges

### Paral-Liner Mobile Parallel Straightedges

**Alvin** Frictionless operation is provided by floating action of blade-mounted nylon rollers that retract at touch, securing blade for accurate drawing.



- Rigid phenolic construction w/black satin finish
- Elevated plexiglass edges prevent ink smears
- Steel ball-bearing pulleys for smooth movement

**Includes** mounting hardware & instructions.

Stk. 196211	Mfg. 1101-30.....	30"	\$ 112.00
Stk. 196213	Mfg. 1101-36.....	36"	117.00
Stk. 196212	Mfg. 1101-42.....	42"	127.00
Stk. 196214	Mfg. 1101-48.....	48"	135.00
Stk. 196216	Mfg. 1101-60.....	60"	179.00

### Paral-Liner Parallel Straightedge Replacement Parts

**Rewiring Kit.** Contains 30' nylon-covered stainless steel wire, spring, 2 eyelets & 2 front wire connectors. For models 1101, 1102 & 2201.  
Stk. 196197 Mfg. PEP-2..... fits board sizes 48" to 72" \$ 9.23

**Hardware Pkg.** Contains 2 cable attachments, 2 cable tie-offs, 2 tension guides & 5 screws.  
Stk. 196198 Mfg. HD4..... fits board sizes 30" to 72" \$ 16.20

**Knobs.** Black, 6/pkg.  
Stk. 196045 Mfg. KN6 fits board sizes 30" to 72", incl. PXB models \$ 7.38

## Proportional Scales

**Alvin** For calculating percentage of enlargements & reduction of photos, artwork and layouts.

**Includes** 2 circular laminated vinyl discs in white & buff.  
Stk. 196488 Mfg. PS69..... 5" \$ 4.92  
Stk. 196489 Mfg. PS79..... 6" 6.77



Sharpeners, Lead Pointers & Erasers, page 91.

Save when you buy in quantity ...  
Pencils, Erasers, Tape & Paper.

## T-Squares

### Alvin

### Acrylic

100% acrylic blade has relieved edges to prevent ink underflow and is bonded to the head for accuracy and strength.

Stk. <b>196131</b>	Mfg. P24	24"	<b>\$ 13.50</b>
Stk. <b>196123</b>	Mfg. P30	30"	<b>15.10</b>

### Stainless Steel

Spring-tempered stainless steel blade with beveled edges for accurate line drawing and cutting. The fixed, cast aluminum head offers strength and durability. 1-1/2"W.

Stk. <b>196112</b>	Mfg. S/S24	24"	<b>\$ 26.80</b>
Stk. <b>196124</b>	Mfg. S/S30	30"	<b>33.30</b>

### Wood

Hardwood blade with see-through acrylic edges that are elevated to prevent smudging and eliminate surface scratches.



Stk. <b>196605</b>	Mfg. C18	18"	<b>\$ 9.00</b>
Stk. <b>196110</b>	Mfg. C24	24"	<b>11.00</b>
Stk. <b>196114</b>	Mfg. C30	30"	<b>12.00</b>
Stk. <b>196606</b>	Mfg. C36	36"	<b>14.00</b>

### Aluminum

Lightweight 1-1/2" wide rigid blade with deeply cut, highly visible graduations. Blade securely riveted to durable, high-impact plastic head. Graduation in 8ths and 16ths.

Stk. <b>196185</b>	Mfg. L18	18"	<b>\$ 9.92</b>
Stk. <b>196186</b>	Mfg. L24	24"	<b>11.30</b>
Stk. <b>196187</b>	Mfg. L30	30"	<b>12.80</b>
Stk. <b>196188</b>	Mfg. L36	36"	<b>14.00</b>

## Protractors

### Alvin

### Circular

Clear .080" plastic with center cut out for convenient finger lifting. Graduations molded in.

Stk. <b>196160</b>	Mfg. P234	4"	<b>\$ 1.80</b>
Stk. <b>196161</b>	Mfg. P236	6"	<b>1.83</b>
Stk. <b>196162</b>	Mfg. P238	8"	<b>8.82</b>



### Semicircular

Clear vinyl with cut-out center. Graduations are clearly divided.

1° graduation.

Stk. <b>196199</b>	Mfg. 3751	12/pkg, 3-1/2"	<b>\$ 11.90</b>
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Solid center design with graduations sandwiched between 2 laminated sheets of clear plastic so they cannot rub off.

1/2° graduation.

Stk. <b>196166</b>	Mfg. 376	6"	<b>\$ 1.85</b>
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## Protractors, cont.

### Semicircular, cont.

### Westcott

Clear vinyl with cut-out center and clearly divided graduations.

5° graduation.

Stk. <b>189150</b>	Mfg. 11200	6"	<b>\$ .97</b>
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Clear .080" plastic with center cut-out, finger lift and beveled edges. Black die-stamped graduations divided into 1/2" increments.

Stk. <b>196100</b>	Mfg. P466	6"	<b>\$ 1.89</b>
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Heavy-duty .090" transparent laminated PVC with beveled outer edge for accuracy. Features center cut-out for convenient finger lift and accurate die-stamped graduations.

Stk. <b>196101</b>	Mfg. P476	6"	<b>\$ 1.67</b>
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## Triangles

### Alvin

### Adjustable

Provides the features of a 45°/90° adjustable triangle, plus those of a protractor. Angles 0° - 90° can be drawn from baseline with 1/2 accuracy. Engraved graduations and aluminum thumbscrew. High impact .100" optically clear acrylic eliminates parallax and allows close pencil tolerance. No inking edge.

Stk. <b>196330</b>	Mfg. 108C	8"	<b>\$ 21.40</b>
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### Transparent

Molded .08" polystyrene with built-in fingerlifts.

30°/60°

Stk. <b>196230</b>	Mfg. S1390-6	6"	<b>\$ 1.46</b>
Stk. <b>196231</b>	Mfg. S1390-8	8"	<b>1.85</b>
Stk. <b>196232</b>	Mfg. S1390-10	10"	<b>2.16</b>
Stk. <b>196233</b>	Mfg. S1390-12	12"	<b>3.04</b>

45°/90°

Stk. <b>196266</b>	Mfg. S1450-6	6"	<b>\$ 1.62</b>
Stk. <b>196267</b>	Mfg. S1450-8	8"	<b>2.16</b>
Stk. <b>196268</b>	Mfg. S1450-10	10"	<b>2.90</b>
Stk. <b>196623</b>	Mfg. S1450-12	12"	<b>3.74</b>



### Smoke-tint

Made of .10" thick styrene with a non-glare smoke tint for easy visibility. Double-beveled edges with fingerlifts for quick placement and removal.

30°/60°

Stk. <b>196238</b>	Mfg. SK360-6	6"	<b>\$ 2.68</b>
Stk. <b>196239</b>	Mfg. SK360-8	8"	<b>2.77</b>
Stk. <b>196240</b>	Mfg. SK360-10	10"	<b>2.96</b>
Stk. <b>196241</b>	Mfg. SK360-12	12"	<b>3.74</b>

45°/90°

Stk. <b>196242</b>	Mfg. SK450-6	6"	<b>\$ 3.33</b>
Stk. <b>196243</b>	Mfg. SK450-8	8"	<b>3.16</b>
Stk. <b>196244</b>	Mfg. SK450-10	10"	<b>3.74</b>
Stk. <b>196245</b>	Mfg. SK450-12	12"	<b>5.58</b>



### Aluminum

Lightweight, durable with matte-satin finish that resists stains and tarnishing. 1/16" graduations on the 90° angle. May also be used as a template for circles from 1/16" to 1-3/8".

45°/90°

Stk. <b>196026</b>	Mfg. AT245-6	6"	<b>\$ 7.34</b>
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## Triangular Scales

### Alvin

Student/vocational scales with easy-to-read black imprinted graduations. Made of satin finished impact plastic. 12" L with open divisions.



**Architect Scale.** Graduations: 3/32, 3/16, 1/8, 1/4, 3/8, 1/2, 3/4, 1, 1-1/2, 3" to the foot. One edge divided to 16ths.

Stk. **196400** Mfg. 110P..... white **\$ 3.47**  
Stk. **196401** Mfg. 110PY..... yellow **7.65**

**Mechanical Draftsman Scale.** Graduations: 1/8, 1/4, 1/2, 1" to the foot; 1/4, 3/8, 1/2, 3/4"; 50ths & 16ths.

Stk. **196369** Mfg. 110PX..... white **\$ 3.47**

**Metric Scale.** Graduations: 1:20, 1:33-1/3, 1:40, 1:50, 1:80, 1:100.

Stk. **196331** Mfg. 117PM..... white **\$ 3.47**

**Engineers Scale.** Graduations: 10, 20, 30, 40, 50, 60 parts to the inch.

Stk. **196370** Mfg. 111P..... white **\$ 3.47**

**Architect Scale** Tapered edges and color coded furrows for quick scale identification. Engraved divisions on a non-glare matte plastic face, bonded over seasoned, laminated bamboo for durability. 12" L.



**Includes case.**

Graduations: 3/32, 3/16, 1/8, 1/4, 3/8, 1/2, 3/4, 1, 1-1/2, 3" to the foot. One edge divided to 16ths.

Stk. **196636** Mfg. 240B..... white **\$ 19.20**

**Metric Scale** Made of high-impact plastic with non-glare faces and tapered edges. Machine engraved graduations and color coded furrows. 30cm L.



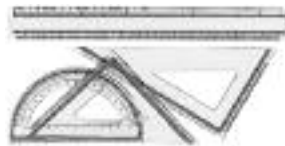
**Includes case.**

Graduations: 1:20, 1:25, 1:50, 1:75, 1:100, 1:125.

Stk. **196167** Mfg. 740PM..... white **\$ 16.60**

## 4-Piece Geometry Set

**Alvin** High tech set made of clear durable plastic with solid stripe accents. Features an easy-grip design.



**Includes ruler, 45°/90° triangle, 30°/60° triangle & protractor.**

Stk. **196130** Mfg. FL41..... **\$ 2.55**

## Curves

### Alvin



196169



196170



196172



196176



196179



196183

### Transparent Curves

Acrylic plastic .060" thick. Smooth and uniform with accurate edges.

Stk. **196169** Mfg. 1010-6..... 5" **\$ 2.55**

Stk. **196170** Mfg. 1010-8..... 6" **3.24**

Stk. **196172** Mfg. 1010-13..... 8" **3.57**

Stk. **196176** Mfg. 1010-17B..... 8" **4.39**

Stk. **196179** Mfg. 1010-18B..... 8-1/2" **4.47**

Stk. **196183** Mfg. 1010-20..... 11" **5.09**

## Curves, cont.

### Alvin, cont.

### French Curves

#### 3-Piece Set

Made of .080" green-tint plastic with vinyl storage envelope.

Sizes: 5-1/2", 6-1/2", 12-1/2".

Stk. **196126** Mfg. FC33..... **\$ 5.38**



#### 8-Piece Set

Full size curve set with double-beveled inking edges. Transparent smoke gray plastic.

Sizes: 5-1/4" to 10".

Stk. **196129** Mfg. FC88... **\$ 14.60**



### Tru-Flex Graduated Curves

Highly-versatile curve has lead core construction and a raised inking edge, plus graduations in both millimeters and inches. Metric graduations are marked in red, inches are marked in black for easy identification on white scale backgrounds.

Stk. **196200** Mfg. 1043-12..... 12" **\$ 6.42**

Stk. **196210** Mfg. 1043-24..... 24" **13.80**



## Templates

### Alvin

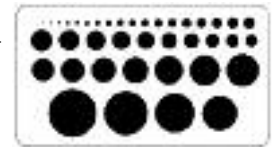
#### Small Circles

39 circle cutouts with centering lines, decimal and mm equivalents.

Size range: 1/16" to 1-3/8".

Size: 4" x 7-1/4" x .030".

Stk. **196612** Mfg. TD1200..... **\$ 7.16**



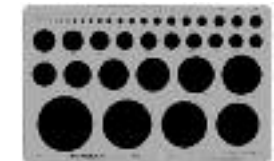
#### Circles

42 circles.

Size range: 1/32" to 2-1/4".

Size: 6-1/4" x 9-3/4" x .020".

Stk. **196339** Mfg. 88T..... **\$ 4.51**



#### Large Circles

11 large circles with fractional, decimal and mm designations, plus corner radii.

Size range: 1-1/2" to 3-1/2".

Size: 8-1/2" x 11" x .030".

Stk. **196220** Mfg. TDI201..... **\$ 8.96**



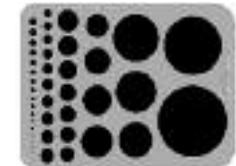
#### Circle Master

44 circles.

Size range: 1/16" to 3".

Size: 7" x 9-1/4" x .030".

Stk. **196351** Mfg. TD445..... **\$ 8.06**



#### Radius Circles

62 circles.

Size range: 3/64" to 7-1/2".

Size: 7-1/2" x 10" x .030".

Stk. **196613** Mfg. TDI202..... **\$ 9.45**



## Templates, cont.

**Alvin, cont.**

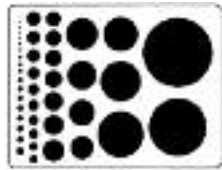
### Combo Circles

45 circles in decimal, fractional, and mm designations.

Size range: 1/16" to 2-1/4".

Size: 7-1/4" x 8-1/4" x .030".

Stk. **196614** Mfg.TD1204..... \$ **8.06**



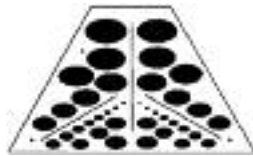
### Isometric Ellipses

38 ellipses of 35°-16' projection.

Size range: 1/8" to 1-9/16".

Size: 6-5/8" x 11-1/4" x .030".

Stk. **196628** Mfg. 123R..... \$ **14.00**



35 ellipses.

Size range: 1/16" to 2-1/2".

Size: 6-1/4" x 9-7/8" x .020".

Stk. **196060** Mfg. 97T..... \$ **5.94**

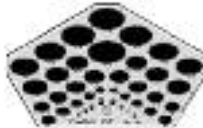


40 ellipses.

Size range: 3/32" to 1-9/16".

Size: 6-1/2" x 10-1/2" x .020".

Stk. **196061** Mfg. 94T..... \$ **5.94**



### Large Isometric Ellipses

25 ellipses with isometric axes.

Size range: 1-1/2" to 7".

Size: 6" x 10" x .040".

Stk. **196629** Mfg. 124R..... \$ **18.30**

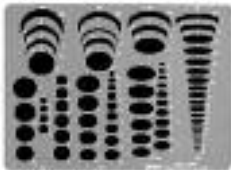


### 4-in-1 Ellipses

74 ellipses with projections of 15°, 30°, 45°, and 60°. Major axes of 5/16" to 2-1/4". Fractional and decimal designations included.

Size: 8-1/4" x 12" x .030".

Stk. **196227** Mfg. TD1262L..... \$ **18.40**

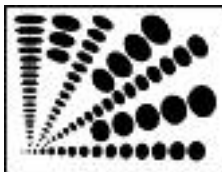


### Combo Ellipses

79 ellipses with projections of 15°, 30°, 45°, and 60°; 15° from 3/16" to 1-5/8"; 30° from 1/8" to 1-1/2"; 45° from 1/8" to 1-3/4"; 60° from 1/8" to 1-5/8".

Size: 8-1/2" x 11" x .030".

Stk. **196638** Mfg. 479R..... \$ **19.10**



### Squares

Forty squares from 1/16" to 2".

Size: 6-1/4" x 9-3/4" x .020".

Stk. **196520** Mfg. 47T..... \$ **6.84**



### General Purpose

Circles, squares, hexagons, triangles, arrows, rectangles, and brackets. Edge scales in rectangles, and brackets. Edge scales in 10ths and 16ths, lettering guide, 3" protractor, and 30°, 60°, 90°, and 35° angles.

Size range: 1/16" to 1".

Size: 5-1/2" x 10-1/4" x .030".

Stk. **196118** Mfg. 18R..... \$ **13.20**



### Small Arrow Indicator

Nine sizes each of 5 different arrow shapes.

Size: 3-5/8" x 5-7/8" x .020".

Stk. **196350** Mfg.TD302..... \$ **4.84**



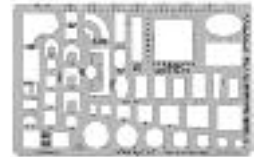
### Home Furnishings

Furniture for living room, dining room, bedroom and office.

Scale: 1/4" = 1'.

Size: 6-1/4" x 9-7/8" x .020".

Stk. **196059** Mfg. 132T..... \$ **6.69**



Furniture pieces for living and dining rooms, den, library, bedroom, and kitchen (36 symbols) with edge scale.

Scale: 1/4" = 1 foot.

Size: 5-1/2" x 8-5/8" x .030".

Stk. **196144** Mfg.TD714..... \$ **8.61**

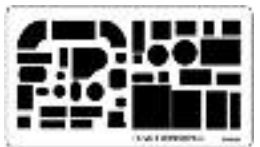


For kitchen, dining room, bedroom, library, family room, and living room.

Scale: 1/4" = 1 foot.

Size: 5-3/4" x 10" x .030".

Stk. **196610** Mfg.TD1155..... \$ **8.78**



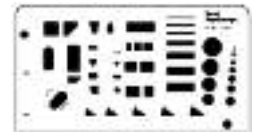
### CBA Architectural

Edge scale, circles, door swings, kitchen and lavatory fixtures, shelves, cupboards, and roof pitch index.

Scale: 1/8" = 1 foot.

Size: 3-3/4" x 6-1/4" x .030".

Stk. **196135** Mfg. 33R..... \$ **14.40**



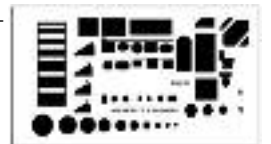
### Architects & Builders

Circles, rectangles, lavatory and kitchen fixtures, roof pitch index, tile layout gauge, door swings, floor elevation indicator and electrical symbols.

Scale: 1/4" = 1 foot.

Size: 5-1/4" x 9-1/4" x .030".

Stk. **196609** Mfg.TD1151..... \$ **9.88**



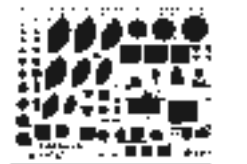
### House Planning & Layout

Circles, squares, rectangles, triangles, hexagons, lavatory and kitchen fixtures, door swings, electrical symbols, and 16" O.C. spacing edge.

Scale: 1/4" = 1 foot.

Size: 5-3/8" x 7" x .030".

Stk. **196608** Mfg.TD1150..... \$ **5.85**



### Professional House Plan

Circles, door swings, kitchen and lavatory fixtures. 6", 8", and 9" spacing notches, electric wiring symbols, tile layout indicator and lower edge strip.

Scale: 1/4" = 1 foot.

Size: 5-1/4" x 9-3/4" x .020".

Stk. **196637** Mfg. 35T..... \$ **5.94**



## Templates, cont.

*Alvin, cont.*

### House Plan Fixtures

Door swings, kitchen and lavatory fixtures, ANSI symbols, circles, floor elevation indicator and roof pitch index.

Scale: 1/4" = 1 foot.

Size: 4-1/4" x 9-1/2" x .030".

Stk. **196352** Mfg. TD1538 ..... \$ **9.86**

Scale: 1/4" = 1 foot.

Size: 4-3/8" x 9-1/2" x .030".

Stk. **196062** Mfg. 22R ..... \$ **12.00**



### House Plan

Stairs, doors, plumbing fixtures, kitchen equipment, appliances and roof pitch index.

Scale: 1/4" = 1 foot.

Size: 5-1/4" x 6-7/8" x .020".

Stk. **196063** Mfg. 30T ..... \$ **4.95**



### Plumbing

Front & side elevations of plumbing fixtures in 1/8" = 1"; 1/4" = 1' & 1/2" = 1'.

Size: 5-1/2" x 9-3/4" x .020".

Stk. **196127** Mfg. 37T ..... \$ **5.94**



### Electrical

Electronic tubes, capacitors, circuit breakers, resistors, relays, switches, logic symbols, etc. Conforms to ANSI Y32.2 and IEEE No. 315. Designed for .200" grid.

Size: 5" x 7" x .030".

Stk. **196616** Mfg. TD1279 ..... \$ **9.86**



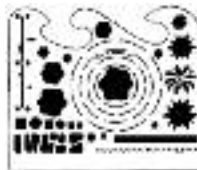
### Landscaping

Tree and shrub contours, hedges, fences, rails, flagstone, and lower edge scale.

Scale: 1/4" = 1 foot.

Size: 7" x 8-1/4" x .030".

Stk. **196611** Mfg. TD1178 ..... \$ **9.86**



### Alphabet

Upper case block letters and numerals.

Size range: 3/8".

Size: 3-3/4" x 6-1/4" x .060".

Stk. **196047** Mfg. 135R ..... \$ **11.10**



### Alphabet, Modern Bold

Upper case letters, numerals, and edge strip.

Size range: 1/8", 3/16" and 1/4".

Size: 2" x 10" x .030".

Stk. **196619** Mfg. TD260V ..... \$ **6.52**



### Ames Lettering Guide

Holes in disc provide 3 lettering guide ratios: 3/5:2/5, 2/3:1/3, and 1:1. Sides of frame provide 68° and 75° angles for slant lettering. Clear plastic with rotating disc and indexed rim.

Stk. **196165** Mfg. L666 ..... \$ **2.58**



## Drafting & Drawing Pencils

*Alvin*

### Draftsman Lead Holders

Four-way vise-grip jaw

holds 2mm or 3mm lead securely in the lightweight barrel. The push-button control instantly releases lead to any desired length.

Stk. **196008** Mfg. DA ..... \$ **6.61**



Economical, lightweight de-

sign with silver cap, transparent plastic barrel, pocket clip and push button lead advance. 4-way vise-grip jaw holds 2mm lead securely.

Stk. **196285** Mfg. B/2 ..... \$ **4.39**



**Refill Leads.** Round drawing leads for any standard lead holder. Supplied in a dispenser. 12/tube.

Stk.	Mfg.	Hardness	Size	Price/Tube
<b>196556</b>	5018-HB	HB	2mm	\$ <b>7.28</b>
<b>196557</b>	5018-H	H	2mm	<b>7.28</b>
<b>196558</b>	5018-2H	2H	2mm	<b>7.28</b>
<b>196559</b>	5018-4H	4H	2mm	<b>7.28</b>
<b>196560</b>	5018-6H	6H	2mm	<b>7.28</b>

### Draft-Line Mechanical Pencils

Shock-absorbing reflex point minimizes lead breakage. 0.4mm stainless steel stylus tube is ideal for both drafting and writing. Includes fixed sleeve for writing and built-in eraser under cap with cleaning needle.

Stk.	Mfg.	Size	Color	Price
<b>196577</b>	XA03	0.3mm	yellow	\$ <b>5.13</b>
<b>196578</b>	XA05	0.5mm	black	<b>5.13</b>
<b>196579</b>	XA07	0.7mm	blue	<b>5.13</b>
<b>196580</b>	XA09	0.9mm	maroon	<b>5.13</b>



### 3-Piece Sets

Stk. **196662** Mfg. XA357C ..... 0.3, 0.5, 0.7mm \$ **17.10**

Stk. **196663** Mfg. XA579C ..... 0.5, 0.7, 0.9mm **17.10**

### Eraser Refills

Stk. **196661** Mfg. EZR ..... 3/pkg. \$ **1.68**

**Refill Leads.** High-quality, high-strength Pentel polymer refill leads provide intense black lines for perfect reproduction. 12/tube.

Stk.	Mfg.	Hardness	Price/Dz.
<b>0.3mm</b>			
<b>196581</b>	300-3-HB	HB	\$ <b>1.79</b>
<b>196582</b>	300-3-H	H	<b>1.79</b>
<b>196583</b>	300-3-2H	2H	<b>1.79</b>
<b>196584</b>	300-3-4H	4H	<b>1.79</b>
<b>0.5mm</b>			
<b>196585</b>	C505-HB	HB	\$ <b>1.07</b>
<b>196586</b>	C505-H	H	<b>1.07</b>
<b>196587</b>	C505-2H	2H	<b>1.07</b>
<b>196588</b>	C505-4H	4H	<b>1.07</b>
<b>0.7mm</b>			
<b>196589</b>	50-7-HB	HB	\$ <b>1.07</b>
<b>196590</b>	50-7-H	H	<b>1.07</b>
<b>196591</b>	50-7-2H	2H	<b>1.07</b>
<b>0.9mm</b>			
<b>196592</b>	50-9-HB	HB	\$ <b>1.07</b>
<b>196593</b>	50-9-H	H	<b>1.07</b>
<b>196594</b>	50-9-2H	2H	<b>1.07</b>

*For Marking Artwork, Drawings, Mechanicals*

### Non-photo Blue Pencils

High quality eraser-tipped pencil creates a fine blue line that will not smear and does not reproduce by most photographic processes.

Stk. **196290** Mfg. 1824T ..... 12/box \$ **11.30**



## Drafting & Drawing Pencils, cont.

Alvin

### Drawing Pencils

Circle drawing pencils have casing of selected cedar with comfortable semi-hex shape. 12/sleeve.

Stk.	Mfg.	Hardness	Price/Dz.
196561	5054-HB	HB.....	\$ 4.43
196562	5054-2H	2H.....	4.43
196563	5054-4H	4H.....	4.43
196564	5054-6H	6H.....	4.43

Kimberly drawing pencils have all-wood casing of western cedar, specially treated for easy sharpening. Nonporous leads for extra long durable points and dense lines of high opacity. 12/box.

Stk.	Mfg.	Hardness	Price/Dz.
196565	525G-HB	HB.....	\$ 8.37
196566	525G-H	H.....	8.37
196567	525G-2H	2H.....	8.37
196568	525G-4H	4H.....	8.37
196569	525G-6H	6H.....	8.37

## Pencil Sharpeners

### Manual

**Boston** Positive-lock pencil guide for 8 different sizes. Pencil stop prevents over sharpening. Includes screws for mounting on desktop or wall.

Stk. 477000 Mfg. 1031 ..... \$ 14.70



**Boston** Heavy-duty unit has solid steel gear and 30 cutting edges. Adjustable pencil guide for 8 different sizes. Beige metal stand. Mounts on desktop or on wall. Mounting screws included.

Stk. 476980 Mfg. 1001 ..... \$ 33.00

**Boston** Vacuum mount sharpener securely anchors to any nonporous horizontal surface. Features solid steel gears with adjustable 8 position pencil guide and pencil stop to prevent over sharpening. Extra large nickel-plated steel shaving receptacle easily removes for emptying. Black and chrome. USA made.

Stk. 477060 Mfg. 1072 ..... \$ 25.90



### Electric



**Boston** All-steel cutter features a true pencil stop to prevent over sharpening. Putty beige finish with woodgrain accent panel.

Stk. 477495 Mfg. 1800..... \$ 27.70

**X-Acto** Heavy-duty model sharpens standard size pencils with a genuine case-hardened solid steel cutter. True automatic pencil stop prevents over sharpening. Sturdy construction, high-impact plastic case. Extra large see-through shavings receptacle. Woodgrain finish.

Stk. 477485 Mfg. 1716 ..... \$ 58.30



## Lead Pointers & Cleaners

Alvin

### Lead Pointers

#### Mini-rotary

Lightweight lead pointer has removable top with built-in point cleaner. Made of high-impact plastic.

Stk. 196546 Mfg. 42 ..... \$ 12.20  
Stk. 196570 Mfg. EP15 . 10 Refill Point-cleaning Pads 4.72



#### Desk Clamp-on Style

**Alvin** Compact pointer makes smooth, precise points. 4 interchangeable collars accommodate various-sized lead holder diameters. Extra-large dust receptacle. 3-point cleaning pads and built-in storage for spare collars and pads. 2-point gauges in the turret measure lead extension for blunt or sharp points.

**Includes** 3 point cleaning pads, 4 collars & clamp (fits table up to 2" T).

Stk. 196053 Mfg. EP17..... \$ 19.20  
Stk. 196052 Mfg. EP14..... 12 Refill Point-cleaning Pads 1.52

### Sandpaper Pointer

Ideal for pointing pencils, leads, charcoal and crayons by hand.

**Includes** 12 sheets of sandpaper mounted on a wooden handle.

Stk. 196596 Mfg. 3435 ..... 12/pkg. \$ 7.10



### Lead Point Cleaners



Convenient disc offers solid cleaning area for newly sharpened pencil points. Double-sided plastic adhesive will adhere to any smooth, clean surface without marring or leaving residue.

Stk. 196247 Mfg. LC32 ..... \$ 1.15

Cleans and lubricates lead points in one stroke. Designed to fit TRU-Point lead pointer.

Stk. 196246 Mfg. LC33 ..... \$ 1.44



## Erasers & Supplies

### Art Gum Erasers

**Alvin** General purpose eraser. Also ideal for removing charcoal lines.

Stk.	Mfg.	Size	Qty/Pkg.	Price
196551	1220AE	1" x 1" x 7/8"	24.....	\$ 8.86
196552	1223AE	2" x 1" x 7/8"	12.....	8.41



### Red Cap Erasers

**Alvin** Traditional chisel-shape eraser is designed to fit all standard-sized pencils.

Stk.	Mfg.	Size	Qty/Pkg.	Price
196595	73015FC	—	144.....	\$ 11.40



### Magic Rub Drafting Erasers

**Alvin** Specially-designed for removing marks from drafting film and tracing paper. White vinyl will not mark, smudge drafting surface.

Stk.	Mfg.	Size	Qty/Pkg.	Price
196553	1954FC	—	12.....	\$ 10.40



## Erasers & Supplies, cont.

### Pink Pearl Erasers

**Alvin** Soft, pliable for smudge-free erasing on most surfaces. Beveled at both ends.



Stk.	Mfg.	Size	Qty./Pkg.	Price
196547	100FC	2-1/2" x 3/4"	24	\$ 15.50
196548	101FC	2-1/2" x 1"	12	9.00

### Clic Eraser

**Pentel** Nonabrasive white vinyl eraser in pen-style holder can be advanced easily as it wears.



Stk.	Mfg.	Size	Qty./Pkg.	Price
196597	ZE22-B	—	each	\$ 2.10
Stk. 196598	Mfg. ZER	—	Refill Eraser Strips, 2/pkg.	\$ 1.91

### Erasing Shield

**Alvin** Quality stainless steel shield protects surrounding artwork when erasing. 26 precision tooled openings. Polished, tarnish-resistant finish.



Stk. 196652 Mfg. 3298 ..... \$ .74

### Professional Draftsman's Cleaning Pads

**Alvin** Powdered gum eraser in a mesh fabric pad that gently removes smudges and dirt from drafting media without abrading the surface. Nothing cleans so easily or so thoroughly.



Stk. 196225	Mfg. 1238	1.5 oz.	\$ 2.77
Stk. 196222	Mfg. 1248	3 oz.	4.25

### QuickKleen Drafting Powder

**Alvin** Finely-ground white cleaning compound that prevents dust, dirt and smudges from being ground into the drafting media. Also an effective cleaning powder for smudged drawings.



Stk. 196221 Mfg. 1246 ..... 2 oz. shaker \$ 4.39

### Dusting Brush

**Alvin** Comfortable curved handle 15-1/2"L holds sterilized mixed horsehair in a single row of tufts to provide a stiff brushing action.



Stk. 196278 Mfg. 2342 ..... \$ 3.14

## Tape

Ideal for Affixing Board Covers  
**Double-sided Tape**



**Alvin** VYCO-Strip double-sided tape. Special, thin, double-coated tissue paper tape has adhesive on both sides, protected by silicone paper. Interlined for quick, easy application.

36 yd. roll w/3" core.

Stk. 196260	Mfg. 2400-A	3/4"	\$ 9.23
Stk. 196279	Mfg. 2400-B	1"	12.20

## Tape, cont.

**Stronger & More Versatile Than Most Invisible Tape**

**Alvin** Disappears completely on all papers. Won't create shadowy ghosts on photocopies or diazo copies. Long-lasting and moisture resistant, it won't curl, crack or yellow. Extra-strength "holding power" is ideal for use by blueprinters, architects, and engineers. Also ideal for mending torn vellum sheets.



3/4" x 36 yd. roll w/1" core.

Stk. 196255	Mfg. CCI34	w/dispenser	\$ 10.50
Stk. 196256	Mfg. CC340	tape only	7.32



### Opaque Drafting Tape

**Alvin** Smooth "low tack" surface. Leaves no stain, sticky particles or abraded surface.

Stk.	Mfg.	Roll Size	Core Size	Price
196276	2300-A	1/2" x 60 yd.	3"	\$ 4.72
196275	2300	3/4" x 10 yd.	1"	3.41
196277	2300-B	3/4" x 60 yd.	3"	6.03



### Drafting Strips

**Alvin** Drafting strips, each 3/8" x 1-1/2", stored in a convenient pull-tab dispenser that supplies 2 strips simultaneously.

Stk. 196136 Mfg. DS125 ..... 500 strips/dispenser \$ 8.00



### Alternative to Masking Tape Drafting Dots

**Alvin** Dots secure work on drawing surfaces with no corners to curl up and tear. Good tack, but easily removed without damage to artwork. Dots each 7/8" dia., supplied in a convenient pull-tab dispenser.

Stk. 196134 Mfg. DM123 ..... 500 dots/dispenser \$ 7.18

## Drawing & Layout Paper

### Cross Section Drawing Paper

**Alvin** Non-reproducible blue grid on 1 side with inch squares accentuated. Good erasing qualities and easy-to-read markings. Convenient pad form.



20 lb.

Stk.	Mfg.	Size	Grid Size	Sheets/Pad	Price
196250	1422-2	8-1/2" x 11"	4 sq./in.	50 sheets ...	\$ 7.34
196252	1422-4	8-1/2" x 11"	8 sq./in.	50 sheets ...	7.34
196253	1422-5	8-1/2" x 11"	10 sq./in.	50 sheets ...	7.34
196402	1422-7	11" x 17"	4 sq./in.	50 sheets ...	\$ 11.90
196403	1422-9	11" x 17"	8 sq./in.	50 sheets ...	13.40
196404	1422-10	11" x 17"	10 sq./in.	50 sheets ...	11.90
196405	1422-12	17" x 22"	4 sq./in.	50 sheets ...	\$ 22.60
196406	1422-14	17" x 22"	8 sq./in.	50 sheets ...	22.60
196407	1422-15	17" x 22"	10 sq./in.	50 sheets ...	22.60
196653	1420-2	8-1/2" x 11"	4 sq./in.	100/pad ...	\$ 12.30
196654	1420-4	8-1/2" x 11"	8 sq./in.	100/pad ...	12.30
196655	1420-7	11" x 17"	4 sq./in.	100/pad ...	\$ 24.20
196656	1420-9	11" x 17"	8 sq./in.	100/pad ...	24.20
196657	1420-12	17" x 22"	4 sq./in.	100/pad ...	\$ 39.00

## Drawing & Layout Paper, cont.

### Premium Heavyweight Mechanical Drawing Paper

**Alvin** Premium quality for drafting and drawing. This tough sulphite paper has a fine tooth finish and exceptionally good erasing qualities. 80 lb. 45% recycled fiber content.

Stk.	Mfg.	Size	Color	Sheets/Pkg.	Price
<b>196380</b>	9040-1	9" x 12"	cream	500	<b>\$ 41.70</b>
<b>196384</b>	9040-3	12" x 18"	cream	500	<b>83.30</b>
<b>196385</b>	9040-6	18" x 24"	cream	250	<b>86.10</b>
<b>196420</b>	9430-1	9" x 12"	green	500	<b>\$ 41.70</b>
<b>196426</b>	9430-3	12" x 18"	green	500	<b>83.30</b>
<b>196383</b>	9430-6	18" x 24"	green	250	<b>86.10</b>
<b>196340</b>	8050-1	9" x 12"	white	500	<b>\$ 40.80</b>
<b>196344</b>	8050-3	12" x 18"	white	500	<b>81.60</b>
<b>196347</b>	8050-6	18" x 24"	white	250	<b>84.30</b>

### Isometric Sketching Paper

**Alvin** White sulphite paper with non-reproducible blue grid is ideal for mechanical drawing or design needs. Drawings can be scaled in 3 directions, the axes of which are 120° apart, one being vertical and the other at 30°. 60 lb.



Stk.	Mfg.	Size	Sheets/Pkg.	Price
<b>196332</b>	1242-5	8-1/2" x 11"	100	<b>\$ 13.80</b>
<b>196333</b>	1242-6	11" x 17"	100	<b>28.10</b>
<b>196334</b>	1242-3	8-1/2" x 11"	500	<b>\$ 53.60</b>
<b>196335</b>	1242-4	11" x 17"	500	<b>104.00</b>

### Tracing Paper

#### Alva-Line Professional Tracing Paper

**Alvin** Medium-weight vellum made of 100% new cotton rag fibers, imparting high resistance to wear and tear. Non-fading blue-white paper has finely-grained surface with excellent pencil/ink receptivity, non-ghosting erasure traits. Pencil lines don't become embedded. 16 lb./0.00275 thickness.

Stk.	Mfg.	Size	Sheets/Pad	Price
<b>196453</b>	6855-S-1	8-1/2" x 11"	100 sheets	<b>\$ 17.80</b>
<b>196454</b>	6855-S-3	9" x 12"	100 sheets	<b>23.10</b>
<b>196455</b>	6855-S-5	11" x 17"	100 sheets	<b>35.60</b>
<b>196456</b>	6855-S-6	12" x 18"	100 sheets	<b>45.70</b>
<b>196457</b>	6855-S-7	17" x 22"	100 sheets	<b>67.60</b>
<b>196458</b>	6855-S-8	18" x 24"	100 sheets	<b>72.90</b>
<b>196443</b>	6855-A	30" x 20 yds.	roll	<b>\$ 54.10</b>
<b>196444</b>	6855-B	36" x 20 yds.	roll	<b>51.50</b>

#### Alva-Line w/ Title Block & Border

<b>196446</b>	6855-B-1	8-1/2" x 11"	100/pad	<b>\$ 34.40</b>
<b>196447</b>	6855-B-2	9" x 12"	100/pad	<b>35.10</b>
<b>196448</b>	6855-B-3	11" x 17"	100/pad	<b>68.70</b>
<b>196449</b>	6855-B-4	12" x 18"	100/pad	<b>64.20</b>
<b>196451</b>	6855-B-5	17" x 22"	100/pad	<b>121.00</b>
<b>196452</b>	6855-B-6	18" x 24"	100/pad	<b>121.00</b>

### Opaque Bond Plotter Paper

**Alvin** Extremely durable, yet economical, snow white finish provides excellent contrast. Great for pen or ink jet use. Use when diazo production is not intended. Recommended pen type: felt tip or ballwriter.

Stk.	Mfg.	Size	Sheets/Pkg.	Price
<b>196408</b>	5811-1	8-1/2" x 11"	100	<b>\$ 8.47</b>
<b>196409</b>	5811-5	11" x 17"	100	<b>13.40</b>
<b>196410</b>	5811-7	17" x 22"	100	<b>25.90</b>
<b>196411</b>	5811-9	22" x 34"	50	<b>\$ 29.40</b>
<b>196412</b>	5811-10	24" x 36"	50	<b>33.30</b>

## Blueprint Machines



**RotoLite** Sturdy machine offers 1-pass, odor-free development. Whiteprinter with dehydrator (ammonia vaporizer) and Vac-U-Flo™

manifold driven by Filter-Flo™ arrestor system. Self-cleaning printer is easy to install and use. Oak trim. 1-yr. mfg'r's warranty.

**Includes** Filter-Flo (filter canisters required, sold separately) & high UV output fluorescent lamp.

#### Economical Basic Unit

#### 30" Blueprint Machine

Printing capability 30" W x 42" sheet size & 30"W x any L. Size 14-1/2"D x 8-3/4"H x 40-3/4"W.

Stk.	Mfg.	Volts	Amps	Throat	Speed (fpm)	Price
<b>640251</b>	SL-30F	120	6	34"	up to 15	<b>\$ 1,705.00</b>

#### Convenient, Economical Copier

#### 42" Blueprint Machine

Printing capability 42" W x any L. Size 14-1/2"D x 8-3/4"H x 52-3/4"W.

Stk.	Mfg.	Volts	Amps	Throat	Speed (fpm)	Price
<b>640256</b>	SL-42/15F	120	7	46"	up to 15	<b>\$ 2,091.00</b>

#### High Performance, Full-size Unit

#### 42" Blueprint Machine

Printing capability 42" W x any L. Size 14-1/2"D x 8-3/4"H x 56-1/2"W.

Stk.	Mfg.	Volts	Amps	Throat	Speed (fpm)	Price
<b>640258</b>	SL-42/20F	120	9	46"	up to 20	<b>\$ 2,630.00</b>

### RotoLite Blueprint Machine Accessories

#### Filter Canisters

Stk. **640190** Mfg. 10830100..... 2/pkg. **\$ 96.70**

#### Oak Stands

Stk. **640270** Mfg. 02053000..... for 30" printers **\$ 311.00**

Stk. **640271** Mfg. 02054200..... for 42" & 48" printers **311.00**

**Alvin Blue Line Diazo Reproduction Paper.** Fine-quality sensitized opaque white paper for Blueprint Machines. Provides a sharp blue image contrasted by a crisp white background. Suitable for a variety of general blueprint production purposes.

20 lb.

Stk.	Mfg.	Size	Sheets/Pkg.	Paper Speed	Price
<b>196387</b>	2421-12	8-1/2" x 11"	250	medium fast..	<b>\$ 21.90</b>
<b>196388</b>	2421-14	9" x 12"	250	medium fast..	<b>24.90</b>
<b>196389</b>	2421-15	11" x 17"	250	medium fast..	<b>42.90</b>
<b>196390</b>	2421-16	12" x 18"	250	medium fast..	<b>45.40</b>
<b>196395</b>	2521-12	8-1/2" x 11"	250	fast.....	<b>\$ 9.01</b>
<b>196399</b>	2521-18	18" x 24"	250	fast.....	<b>37.90</b>

Save when you buy in quantity ...

**Pencils, Erasers, Tape & Paper.**

Call for details. 800-831-5904.

