

# Technical Specifications

## Intellect Wave® Classroom Furniture

August 2015

### SHELL

One-piece contoured shell shall be made of static-free high-impact polypropylene. Colorfastness ensured through complete color impregnation throughout the molded part. Strength and durability shall be assured through an engineered internal structural cavity which eliminates the need for unsightly ribs on the back of the shell. Rolled edges for comfort and strength. Textured front and back. Wide, ergonomic handle molded into chair back for ease of mobility. Shell fastens to frame with six  $\frac{1}{4}$ " - 20 x  $\frac{5}{8}$ " Torx head screws. Upholstered chairs have partially exposed polypropylene surfaces. Fabric is upholstered over  $\frac{9}{16}$ " foam on the back and seat and fastened to an inner shell with screws. Back upholstery covers handle.

### FRAMES

#### **Cantilever Chair, 4-Leg Chair, 4-Leg Chair on Casters, Music Chair, Café Stool, Double-Entry Desk, and Tablet Arm Chair**

0.75" x 1.5" O.D. 14-gauge elliptical steel tubing welded to a 14-gauge steel plate. Frame shall be nickel-chrome plated or powder-coated after all welding processes are complete. Music chair shall have a forward-tilted (5°) seat back and an elevated seat height to promote a more upright posture.

#### **G2 Tablet Arm Chair**

G2 tablet arm support consists of a  $\frac{51}{64}$ " x  $1\frac{37}{64}$ " 14-gauge oval tube welded to the seat plate and welded to a 16-gauge steel support bracket. The pivot mechanism consists of two pivot cams, two steel hinge barrels, a pivot shaft, and a hinged steel support plate which fastens to the tablet board. The support shall be powder-coated. Right- and left-hand models shall be available.

#### **Combination Desk**

0.75" x 1.5" O.D. 14-gauge elliptical steel tubing welded to a 12-gauge steel plate. Frame shall be nickel-chrome plated or powder-coated after all welding processes are complete.

#### **Fixed Height – 4-Leg Desk, Trapezoid Desk, and Tripod Desk**

0.75" x 1.5" O.D. 15-gauge elliptical steel tubing welded to a heavy 11-gauge steel plate. Frame shall be nickel-chrome plated or powder-coated after all welding processes are complete. Legs fasten to top with K50 2.24 x 13mm Torx head screws for hard plastic tops. Legs fasten to top with 12 x  $\frac{3}{4}$ " Phillips pan head screws for laminate tops.

#### **Fixed Height – Cantilever Desk and Two-Student Desk**

0.75" x 1.5" O.D. 14-gauge elliptical steel tubing welded to a heavy 11-gauge mounting bracket. Frame shall be nickel-chrome plated or powder-coated after all welding processes are complete. Frames fasten to top with K50 2.24 x 13mm Torx head screws for hard plastic tops. Frames fasten to top with 12 x  $\frac{3}{4}$ " Phillips pan head screws for laminate tops.

#### **Adjustable Height – 4-Leg Desk, Trapezoid Desk, Tripod Desk, and ADA 4-Leg Desk**

1.68" x 0.99" O.D. 11-gauge elliptical steel tube welded to a heavy 11-gauge steel plate. Top section of leg shall be nickel-chrome plated or powder-coated after all welding processes are complete. Telescoping lower section of 0.75" x 1.50" O.D. 14-gauge elliptical steel tube in bright chrome finish; locks with  $\frac{1}{4}$ " screw in 1" increments in a 22"- 34" height range. Legs fasten to top with K50 2.24 x 13mm Torx head screws for hard plastic tops. Legs fasten to top with 12 x  $\frac{3}{4}$ " Phillips pan head screws for laminate tops. Tripod desks shall have  $\frac{7}{16}$ " diameter steel wire crossbrace welded to the three legs.



### **Adjustable Height – Cantilever Desk and ADA Cantilever Desk**

0.75" x 1.5" O.D. 14-gauge elliptical steel tube welded to a heavy 11-gauge steel mounting bracket. Top section of leg shall be nickel-chrome plated or powder-coated after all welding processes are complete. Telescoping lower section in bright chrome finish; locks with  $\frac{1}{4}$ " screw in 1" increments. Adjustable height range is 24"- 30" and ADA height range is 28"- 34". Legs fasten to top with K50 2.24 x 13mm Torx head screws for hard plastic tops. Legs fasten to top with 12 x  $\frac{3}{4}$ " Phillips pan head screws for laminate tops.

### **Task Chair and Task Stool**

The frame is constructed of a 12-gauge base plate powder-coated black.

### **Task Chair with Tilt Mechanism**

The tilt mechanism is attached to the underside of the chair with a 10-gauge steel mounting plate.

## **PNEUMATIC HEIGHT ADJUSTMENT**

### **Task Chair and Task Stool**

Lever-activated pneumatic cylinder enables seat height adjustment from 16  $\frac{1}{2}$ " to 21  $\frac{1}{2}$ " (large chair), 14" to 16  $\frac{1}{2}$ " (medium chair) and 20  $\frac{1}{4}$ " to 30  $\frac{3}{4}$ " (stool).

## **TILT MECHANISM**

### **Armless Task Chair only**

Tilt control is a stamped, welded mechanism with a coil spring to supply the force with a tension adjustment knob. The control also utilizes a single lever for both height adjustment and tilt lock. The at-rest seat angle is 3.5° with a total rearward travel of 19.5°.

## **BASE**

### **Task Chair**

24" injection-molded glass-reinforced nylon 5-blade base. Black only.

### **Task Stool**

26" injection-molded glass-reinforced nylon 5-blade base. Black only.

## **TOP**

### **Cantilever Desk, 4-Leg Desk, Linear Tripod Desk, Combination Desk, and Double-Entry Desk**

Solid hard plastic, molded thermoset plastic with pencil groove or high-density particleboard core covered with .030" high-pressure laminate top and .020" phenolic backing sheet and 73P polypropylene edge. Curved front worksurfaces shall have comfort curve on user side and 2  $\frac{3}{8}$ " radius corners and measure 19" x 26". Straight front hard plastic worksurfaces shall measure 19.375" x 26.75". Hard plastic top is  $\frac{5}{8}$ " thick and the laminate top is  $\frac{3}{4}$ " thick. Rectangle tops measure 19" x 26" and the trapezoid top measures 20.5" x 32". ADA top measure 36.4" x 20" and the hard plastic ADA top does not have a comfort curve or pencil groove. Linear tripod tops measure 27.4" x 27.4" x 36.7".

### **Two-Student Desk and Contour Tripod Desk**

High-density particleboard core covered with .030" high-pressure laminate top and .020" phenolic backing sheet and 73P polypropylene edge. Two-student desk top measures 19" x 60" and is only available in  $\frac{3}{4}$ " laminate. Two-student desk has two comfort curves. Contour tops measure 30.5" x 31.3" x 37.2".

### **Tablet Arm**

Standard and laptop tablet boards are  $\frac{5}{8}$ " 11-ply plywood core with high-pressure laminate with clear-coat edge and plain backer sheet. G2-tablet boards are 15mm, 11-ply plywood core with .050" high-pressure laminate with clear-coat edge and plain backer sheet. The working surface of the standard tablet arm is 14"w x 11"d. The working surface of the laptop tablet is 18"w x 14"d. The working surface of the G2 tablet is 13  $\frac{3}{4}$ "w x 18  $\frac{1}{8}$ "d.

## ARMREST

### Task Chair and Task Stool

A tubular steel frame supports self-skinning urethane armrests. The support is bolted to the seat underside. Armrest paint color and top pad are always black. (Field installable). Arms are not available on chairs with tilt mechanisms.

## ACCESSORIES

### Book Bag Hook

Optional book bag hook formed from  $\frac{1}{4}$ " solid wire rod. Chrome finish provides long lasting wear resistance. Fastens to underside of top with two K50 2.24 x 13mm Torx head screws for hard plastic tops. Fastens to underside of top with two  $12 \times \frac{3}{4}$ " Phillips pan head screws for laminate tops.

### Book Basket (under desk)

Optional book basket is made of chrome plated 7mm diameter solid steel wire. Measures 21.5" wide, 12" deep, and 4.5" high. Fastens to underside of top with eight K50 2.24 x 13mm Torx head screws for hard plastic tops. Fastens to underside of top with eight  $12 \times \frac{3}{4}$ " Phillips pan head screws for laminate tops.

### Book Box (under desk)

Optional solid molded thermoplastic polypropylene book box. Translucent finish helps provide safe environment while allowing for some degree of personal privacy. Molded-in pencil tray keeps items conveniently inside book box within easy reach, not on the floor or in the back of the book box. Book box for cantilever and two-student desks measures  $19\frac{1}{2}$ " wide,  $15\frac{1}{8}$ " deep, and  $3\frac{1}{4}$ " high and is available in five basic colors plus translucent. Book box for 4-leg desk measures 15" wide, 14" deep, and 4" high and is available only in translucent. Fastens to underside of top with nine K50 2.24 x 13mm Torx head screws for hard plastic tops. Fastens to underside of top with nine  $12 \times \frac{3}{4}$ " Phillips pan head screws for laminate tops.

### Book Rack (under chair)

Optional book rack is an external framework of  $\frac{5}{16}$ " diameter solid wire rod welded to the chair frame. Cross braces of  $\frac{5}{16}$ " diameter solid wire rod welded between external framework. Measures 13" wide, 12" deep, and 9" high.

## GLIDES

Swivel-type polished zinc-plated steel, nylon, or felt glides. KI recommends consulting with the floor manufacturer for specific glide recommendations.

**Note:** Felt glides increase product height by  $\frac{1}{4}$ ".

## CASTERS

### Carpet Casters – Task Chair, Task Stool, and 4-Leg Chair on Casters

Double wheels of high-impact thermoplastic. High-impact plastic frame. Black finish only.

### Hard Floor Casters – Task Chair, Task Stool, and 4-Leg Chair on Casters

Double wheels of soft plastic. High-impact plastic frame. Black finish only.

## TRANSPORT DOLLY

Frame is welded tubular steel construction with steel straps that are bent to conform to the nesting angle of the product being transported. Four steel casters (wheel housings) - 2 fixed and 2 swivel - are welded directly to the four corners of the dolly frame. Swivel casters have ball bearings for smooth operation.

Wheels are 5" diameter x 1.38" wide hard rubber with Delrin bearings. Wheels are attached to the casters with  $\frac{3}{8}$ " diameter bolts (axle). Black powder-coated finish.