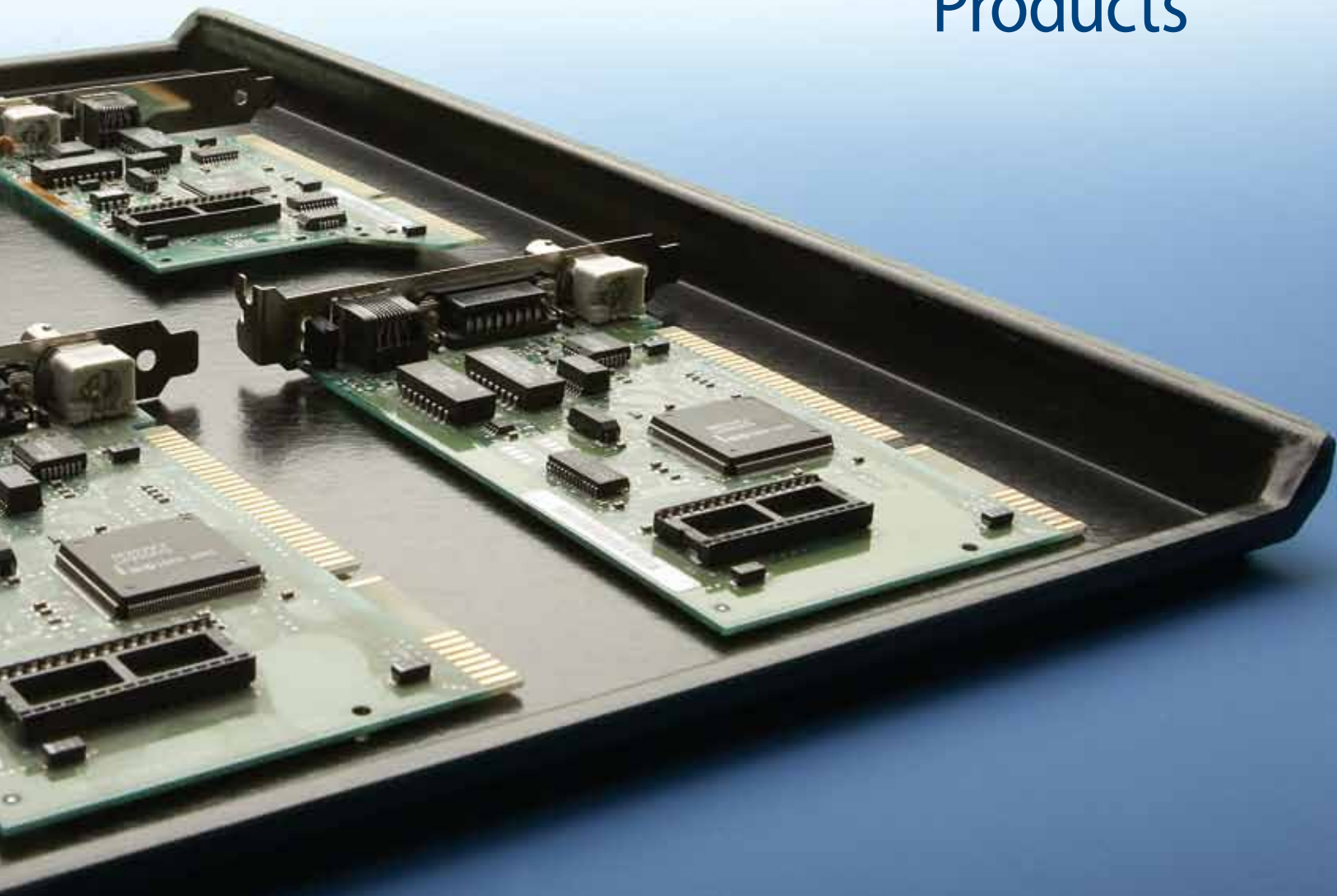
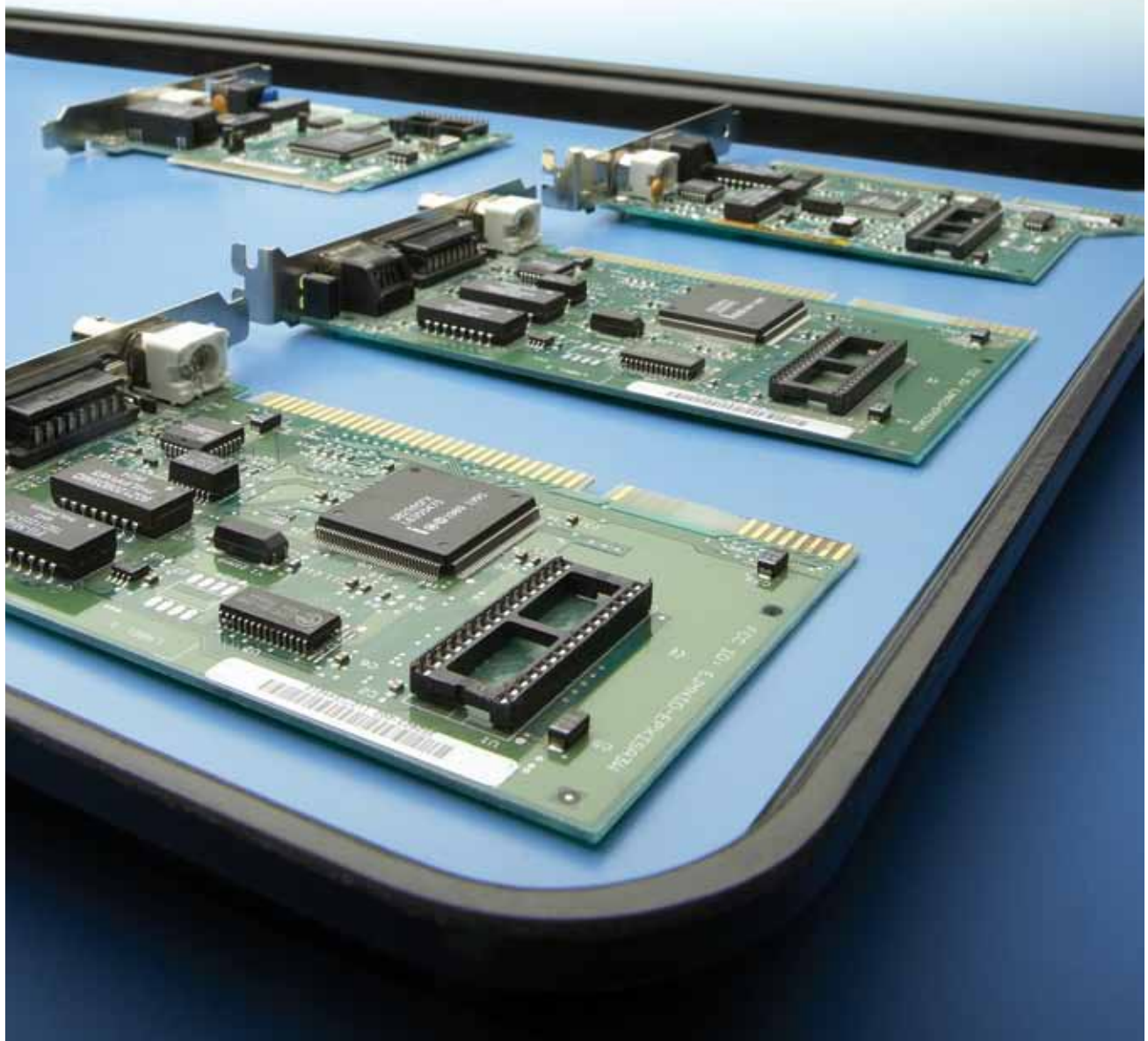




ESD-Safe Material Handling Products



The material matters in material handling



MFG Tray ESD-safe conductive products have a surface resistivity of $<10^5$ to 10^6 ohms. Static dissipative products have surface resistivity between 10^5 to 10^{11} ohms. MFG Tray Fibrestat products meet or exceed ANSI/ESD S20.20 standard for ESD protection.

The material matters in ESD-safe material handling.

Complete ESD protection for sensitive electronic components

MFG Tray Fibrestat products are molded from high-strength, glass-reinforced composites and are specifically formulated to dissipate electrostatic discharge. The fiber component provides strength and dimensional stability, while the thermoset resin provides specific chemical, electrical and thermal properties. The high conductivity/low electrical resistance of MFG Tray's composite material are permanent properties that ensure the safe transfer of electrostatic discharge away from sensitive microprocessors, assemblies, loaded circuit boards and other electronic components for the life of the tray or container.

Exceptional performance and durability

Thanks to their composite design, MFG Tray Fibrestat products offer inherent strength and weight-carrying capacity per individual container or tray as well as exceptional stacking capability under heavy loads. They are ideal for machine integration and robotic applications, and can be used in temperatures ranging from -60° to 250° F (-51° to 121° C). Fibrestat products are resistant to detergents, cutting oils and alkaline solutions ranging from 3.0 to 10.0 pH. Unlike thermoplastic and corrugated products, Fibrestat composites offer ESD protection over the life of the product.

Variety of standard configurations and options

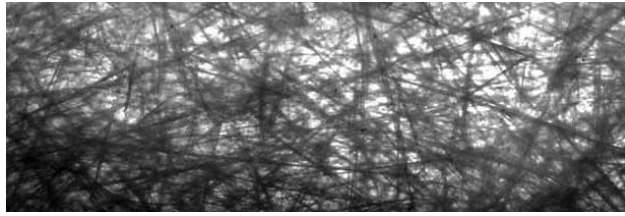
The MFG Tray Fibrestat line is comprised of a variety of products designed to safely and effectively convey, carry, accumulate and store static-sensitive parts and assemblies. Optional designs such as wiring ports, removed ends, specialized hand-holds, tray mats and other variations are also available. Contact the factory directly for additional sizes and more details about custom-fabricated products.

ESD Composite Work Surface



ESD Composite Rigid Work Surface

- Expressly designed for use in assembly, soldering and rework areas
- Comes complete with snap, 15' grounding cord and dual receptacle
- Resistant to chemicals, flux and hot solder
- Specifications:
 - Size: 24" x 36"
 - Thickness: .060"
 - Resistivity: 10^6 to 10^{11} ohms
 - Standard Color: Blue-gray



Fibers in MFG Tray products are multidirectional or random for optimal tensile and torsion strength of the finished part. Fiber lengths vary from 1" to 2". The composites can contain up to 35 percent of randomly oriented fibers by weight.



The MFG Fibrestat product line is comprised of standard and custom conveyor and assembly trays, shallow trays, cart transport trays, nesting and stacking containers and pallets.

ESD Specialty Conveyor Trays



ESD Specialty Conveyor Tray
Model No. 629000 and 629100

- Model 629000 features a textured bottom for improved contact with conveyors
- Model 629100 features a smooth bottom for use with light-sensitive sensors

ESD Trays

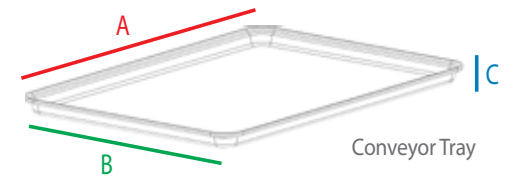
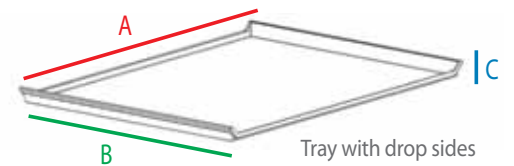
- Specifically designed for component assembly and for compatibility with conveyors or cart transport systems
- Various configurations include dropped sides or ends, and stacking designs



ESD Conveyor and Assembly Trays

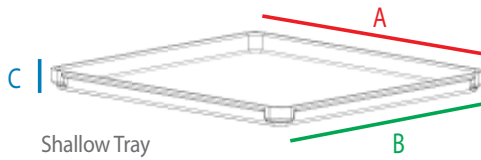
Product Name	Dimensions (L x W x H, inches)			Model No.
	A	B	C	
Tray with drop sides	24 1/2	21 1/8	1	204109
Tray with drop sides	25 1/2	22 1/2	1	205109
Tray with drop sides	24 1/2	22 1/2	1	206109
Tray with drop sides	27 7/8	22 3/8	1	207109
Tray with drop sides	23 3/8	20 1/4	1	208100
Tray with drop sides	24 1/2	21 1/2	1	209109
Tray with drop sides	27	21	1	210109
Tray with drop sides	26 1/4	22	1	211109
Tray with drop sides	28	21 1/2	1	212109
Tray with drop sides	26 1/4	23	1	213109
Tray with drop sides	24 1/2	23	1	214109
Tray with drop sides	34 1/4	21 3/8	1	215109
Tray with drop sides	27	20	1	217109
Tray with drop sides	27	20	1	217100
Tray with drop sides	22 1/2	20	1	218109
Pallet	26	18	5/8	222000
Pallet	22	22	3/4	228000
Pallet	28	22	2 3/4	230300
Upper Pallet Tray				232100
Pallet	30	24	2 1/8	232300
Tray	16 3/8	12	1	302000
Tray	13 1/4	10 5/8	1	303000
Tray	20 3/8	15 1/8	1	304000
Tray	21 7/8	16	1	305000
Tray	18	14	1	318000
Tray	12 3/4	10 1/2	5/8	322600
Tray	20	16	3	325309
Tray	25 3/4	17 7/8	1 1/8	332000
Tray	25 3/4	8 3/4	1 1/8	333000
Tray	17 3/4	11 3/4	1	334000
Tray	17 3/4	9	1	335000
Tray	24	12 5/8	3/4	337009
Tray	27	12 1/2	3/4	338009
Tray	16	6	1	356000
Tray	20 7/8	14 1/2	1/2	375300

Safe, versatile work surfaces. MFG Fibrestat trays readily integrate with automatic conveyors and assembly lines while ensuring easy worker access for parts assembly operations. Strong composite construction ensures longevity.





Wide selection of sizes for various components. Shallow trays are available in a wide range of dimensions to accommodate varying sizes of components and available work spaces.



Shallow Tray

ESD Tray Mats



ESD Trays with Tray Mats

- Features a conductive bottom layer with static dissipative top
- Resistant to hot solder, irons and most solvents
- Specifications:
 - Thickness: .080"
 - Hardness: Shore A, 60
 - Tensile: >1000 PSI
 - Charge decay: >300 %
 - Resistivity: 10^6 to 10^{11} ohms
 - Charge decay (5kV-50V): 0.01 seconds

Product Name	Dimensions (inches)			Model No.
	A	B	C	
Tray Mat	19.18	19.18	.080	217-6005
Tray Mat	16.33	24.27	.080	332-6004
Tray Mat	18.50	18.50	.080	629-6002

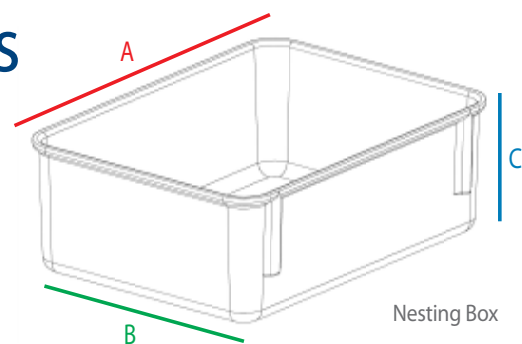
ESD Shallow Trays

Product Name	Dimensions (L x W x H, inches)			Model No.
	A	B	C	
Tray with drop ends	29 7/8	23 7/8	1 1/2	600000
Tray with drop ends	29 7/8	23 7/8	2	600300
Tray	26	26	1 1/4	601209
Tray	24 1/4	24 1/4	1 7/8	602209
Tray	36 1/2	24 3/4	1 1/2	603209
Tray	30	30	1 1/4	604209
Tray	35 7/8	23 1/2	1 1/2	605109
Tray	25 1/4	19 1/4	1 1/8	606109
Tray	25 3/4	13 5/8	1 1/4	607009
Tray	30	20	2	608109
Tray	47 5/8	23 7/8	2 1/4	609009
Tray	36 1/2	17 1/2	1 5/8	610009
Tray	24 1/4	20 1/4	1 1/2	611009
Tray	28	28	1 1/2	612009
Tray	7 1/2	7 1/2	1/2	613000
Tray	39 1/2	19 1/2	2	614009
Tray	30	26	1 1/4	615009
Tray	30 1/2	24 1/2	1 7/8	617009
Tray	39	19	2	618009
Tray	40	28	1 1/2	619009
Tray	32	18	1 1/4	620009
Tray	20 5/8	16 5/8	1 1/2	622000
Tray	31	25	2 3/4	624000
Tray	24 1/4	20 1/4	1 1/8	626009
Tray	31	26	1 5/8	627009
Tray	22 1/2	14 1/2	2	628000
Textured Bottom Tray	19 1/2	19 1/2	1 1/4	629000
Smooth Bottom Tray	19 1/2	19 1/2	1 1/4	629100
Tray	22 7/8	15 1/2	1 1/4	636000

ESD Nesting Boxes with Lids

- Lids protect parts during storage and enable boxes to be stacked
- Available in a variety of lengths, widths and depths
- Smooth, radiused edges facilitate handling

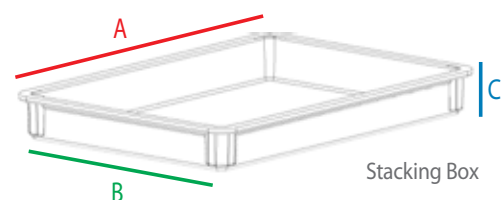
Product Name	Dimensions (L x W x H, inches)			Model No.
	A	B	C	
Nesting Box	21 1/4	15	5	330000
Lid	21	15	3/8	330119
Nesting Box	20 1/2	12	5	331000
Nesting Box	20 3/4	15 3/8	5	336009
Nesting Box	16 1/2	12	10	903140
Nesting Box	22 5/8	17 1/4	14	912140
Nesting Box	22 3/8	17	10	912240
Lid (912140, 912240)	23	17 5/8		912110
Nesting Box	20 1/2	17	10 3/8	919100
Nesting Box	20 1/2	17	12	919200
Lid	20 1/2	17		919110
Nesting Box	11 3/4	8 3/4	4 1/8	920100
Lid	11 3/4	8 3/4		920110
Nesting Box	6 1/8	4 7/8	2 1/8	922100
Lid	6 1/8	4 7/8		922110
Nesting Box	9 3/4	6 1/8	2 1/8	922100
Lid	9 3/4	6 1/8		922110
Nesting Box	9 3/4	9 1/4	4 1/2	923100
Lid	9 3/4	9 1/4		923110
Nesting Box	9 3/4	9 1/4	2 1/8	924100
Nesting Box	9 3/4	6 1/8	4 1/2	926100
Nesting Box	22	16 1/2	4 1/2	929000
Nesting Box	12 3/8	9 3/4	4 1/2	930100
Lid	12 3/8	9 3/4		930110
Nesting Box	28 7/8	20 3/8	4 1/2	931000



ESD Stacking Boxes

- Designed for parts containment and stacking
- Inherent strength and stability enables boxes to be stacked up to several feet high with complete dimensional stability
- Offered in a range of lengths, widths and depths

Product Name	Dimensions (L x W x H, inches)			Model No.
	A	B	C	
Stacking Box	24 1/2	21 3/4	2 5/8	220000
Stacking Box	27	21	2 5/8	221000
Stacking Box	18 3/4	11 7/8	1 3/4	804000
Stacking Box	25 3/4	17 3/4	1 1/8	806200
Stacking Box	22	12	1 1/4	808100
Stacking Box	23 3/8	12	3 1/8	808200





Stacking Box
Model No. 870000



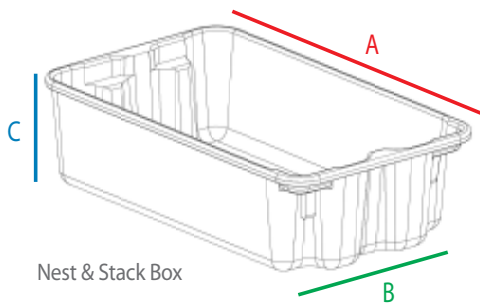
Stacking Box
Model No. 220000

ESD Stacking Boxes cont.

Product Name	Dimensions (L x W x H, inches)			Model No.
	A	B	C	
Lid	23 3/8	12		808210
Stacking Box	23 3/8	12	6	808300
Stacking Box	23 3/8	12	4 3/8	808400
Stacking Box	20 3/4	11 1/4	3 1/4	814100
Stacking Box	20 3/4	11 1/4	5	814200
Stacking Box	25 3/4	15 3/4	7 1/4	814300
Stacking Box	33 1/8	15 5/8	8	814400
Stacking Box	20 3/4	11 1/4	2 3/8	814700
Stacking Box	23	16 3/4	1 1/8	820100
Stacking Box	23	22 3/4	8	826000
Stacking Box	22 3/4	22 3/4	1	827000
Stacking Box	32 1/4	24 1/2	1 1/4	829000
Stacking Box	27 1/8	12	2 7/8	846100
Stacking Box	27 1/8	12	6 7/8	846200
Stacking Box	26	20	1 1/2	848000
Stacking Box	25 3/4	17 3/4	3	870000
Stacking Box	25 3/4	17 3/4	4 1/2	875000
Stacking Box	25 3/4	17 3/4	6	880000
Lid for 870, 875, 880	25 3/4	17 3/4		887000
Stacking Box	28	20	3	893100

ESD Nest & Stack Boxes

- Optional lids protect parts during storage
- Nest and stack design saves valuable space: stack when full, rotate 180 degrees and nest when empty
- Flared ends facilitate handling



Nest & Stack Box



Nest & Stack Box
Model No. 780400

Product Name	Dimensions (L x W x H, inches)			Model No.
	A	B	C	
Nest & Stack Box	23 1/2	16 1/8	10 1/4	705400
Lid	23 1/2	16 1/8		705419
Nest & Stack Box	42 1/2	20	14 1/4	780000
Nest & Stack Box	42 1/2	20	7 1/2	780100
Lid	42 1/2	20		780110
Nest & Stack Box	17 7/8	10 5/8	5	780200
Nest & Stack Box	19 3/4	12 1/2	6	780300
Lid	19 3/4	12 1/2		780310
Nest & Stack Box	20 1/2	12 7/8	8	780400
Lid	20 1/2	12 7/8		780410
Nest & Stack Box	24 1/4	14 3/4	8	780500
Lid	24 1/4	14 3/4		780510
Nest & Stack Box	25 1/4	18	10	780600
Lid	25 1/4	18		780610
Nest & Stack Box	27 1/2	20	14 1/8	780700
Lid	27 1/2	20		780710
Nest & Stack Box	25 1/4	18	6	780800

MFG Tray ESD-Safe Material Handling Products



MOLDED FIBER GLASS TRAY



A Molded Fiber Glass Company