



PLASTICS GUIDE

MATERIAL SPECIFICATIONS
& FORMING GUIDELINES

EVERY CASE,
COVERED.



PLASTICS WITH LEGACY.

Long before clear appliances became a standard part of orthodontic treatment, Tru-Tain was helping shape what they could become.

Founded in 1975, Tru-Tain grew from the pioneering work of Dr. Lloyd Truax, the first orthodontist on staff at the Mayo Clinic and developer of the original Tru-Tain clear retainer. After years of clinical development and more than 1,500 test retainers, his work helped establish a practical approach to clear retention and early sequential tooth movement. As other orthodontists began recognizing the potential of these clear appliances, they turned to Dr. Truax for help sourcing the same reliable, medical-grade plastic polymers he used in his own practice. That demand helped transform a clinical innovation into Tru-Tain.

More than 50 years later, we remain focused on the materials behind the appliance. Tru-Tain supplies thermoforming plastics for aligners, retainers, mouthguards, splints and other custom appliances, with an emphasis on dependable performance, straightforward fabrication and knowledgeable, personal support.

From everyday materials to specialized applications, this guide is designed to help you quickly select the right plastic and forming parameters for the job.

Because the right appliance starts with the right material.

For complete instructions and safety data sheets please visit Tru-Tain.com or call 1-800-843-0904

This guide is intended as a quick reference only. Always refer to product specific fabrication instructions and safety information prior to forming. All heating times and codes mentioned are general guidelines only, results may vary by forming machine.

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Tru-Tain DX

(COPOLYESTER)

Use for: Aligners & Retainers

- ✓ Clear protective masking on both sides
- ✓ Can be formed with masking on or off
- ✓ Will bond with acrylic
- ✓ BPA, latex, gluten & monomer free
- ✓ Extra durability & wear resistance than standard PETG

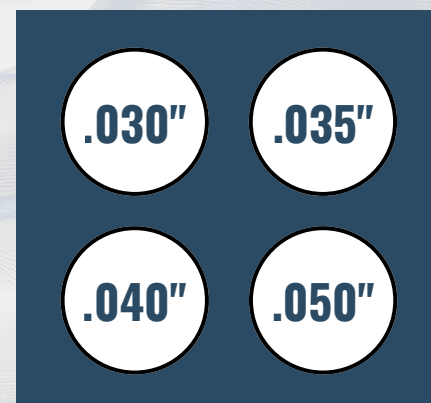


COMPARE TO:
ESSIX® ACE®

FORMING GUIDELINES

THICKNESS	.030" 0.75MM	.035" 0.88MM	.040" 1.0MM	.050" 1.27MM
BioSTAR	Code 113	Code 123	Code 133	Code 144
MiniSTAR	Code 123	Code 133	Code 143	Code 154
MiniSTAR S	Code 133	Code 143	Code 153	Code 164
Druformat	Heating - 1:10 Cooling - 1:40	Heating - 1:15 Cooling - 1:45	Heating - 1:20 Cooling - 1:50	Heating - 1:30 Cooling - 2:00

GAUGES

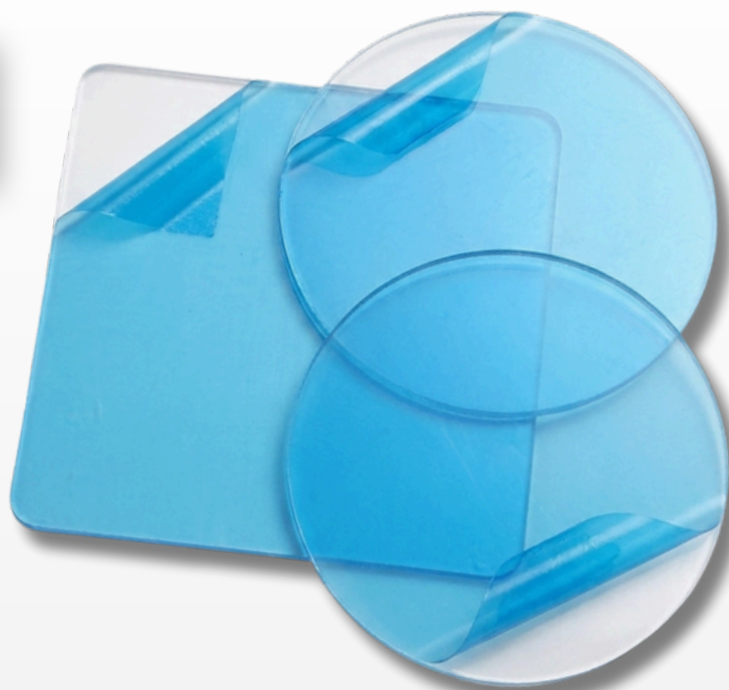


Surgical Splint

(PETG)

Use for: Splints, Retainers,
Bite Planes, & Bleaching Trays

- ✓ Protective blue masking on both sides
- ✓ Remove masking prior to forming
- ✓ Will bond with acrylic
- ✓ BPA, latex, gluten & monomer free

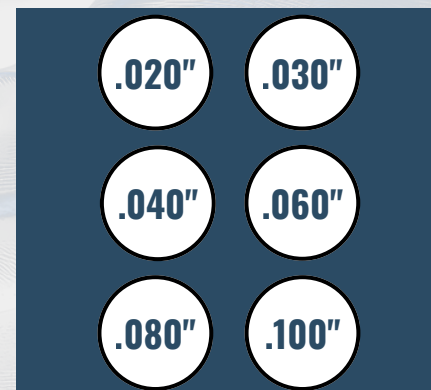


COMPARE TO:
ESSIX® A+®

FORMING GUIDELINES

THICKNESS	.020" 0.5MM	.030" 0.75MM	.040" 1.0MM	.060" 1.5MM	.080" 2.0MM	.100" 2.5MM
BioSTAR	Code 103	Code 103	Code 113	Code 133	Code 184	Code 204
MiniSTAR	Code 113	Code 113	Code 123	Code 143	Code 194	Code 214
MiniSTAR S	Code 113	Code 123	Code 133	Code 153	Code 204	Code 224
Drufomat	Heating - 0:55 Cooling - 1:15	Heating - 1:00 Cooling - 1:25	Heating - 1:05 Cooling - 1:35	Heating - 1:30 Cooling - 1:50	Heating - 1:50 Cooling - 2:00	Heating - 2:05 Cooling - 2:20

GAUGES

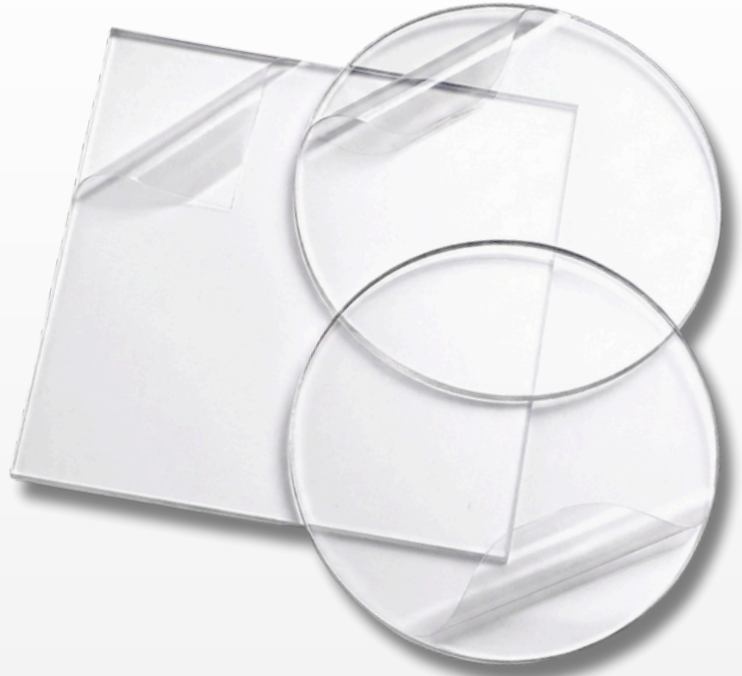


TRU-PU

(POLYURETHANE)

Use for: Aligners

- ✓ Clear protective masking on both sides
- ✓ Meant to be formed with the masking ON
- ✓ Will NOT bond with acrylic
- ✓ BPA, latex, gluten & monomer free
- ✓ Superior elasticity



COMPARE TO:
ZENDURA® A

FORMING GUIDELINES

THICKNESS	.030" 0.75MM
BioSTAR	Code 122
MiniSTAR	Code 132
MiniSTAR S	Code 142
Drufomat	Heating - 1:10 Cooling - 1:20

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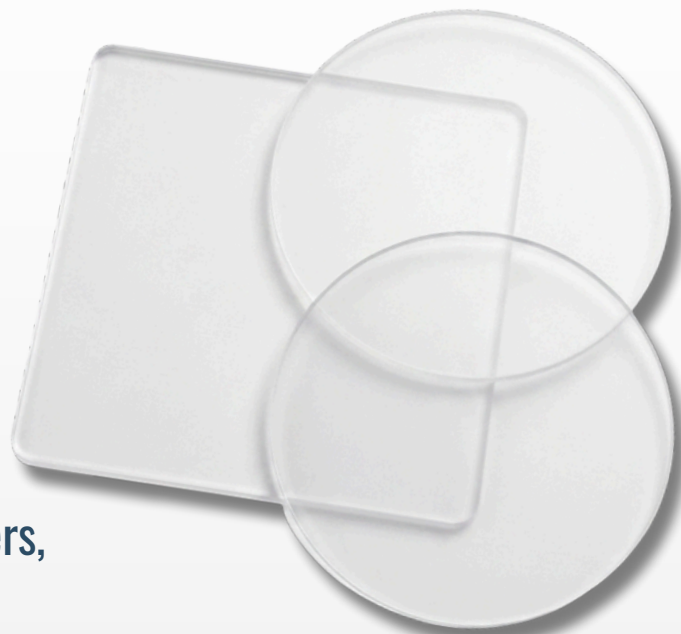


Coping Plus

(CLARIFIED
POLYPROPYLENE)

Use for: Aligners & Retainers for Bruxers,
Temporary Crown & Bridge Forms,
Bleach Trays, Copings, Bite Planes

- ✓ Clarified
- ✓ No protective masking
- ✓ Will NOT bond with acrylic
- ✓ BPA, latex, gluten & monomer free

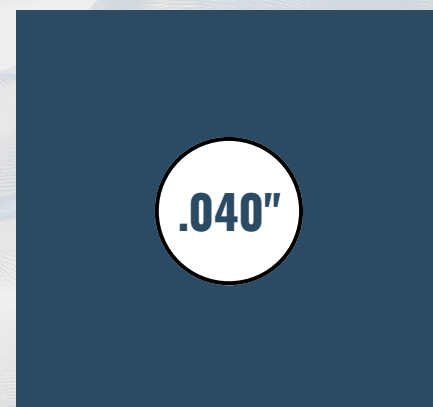


COMPARE TO:
ESSIX® C+®

FORMING GUIDELINES

THICKNESS	.040" 1.0MM
BioSTAR	Code 163
MiniSTAR	Code 173
MiniSTAR S	Code 173
Drufomat	Heating - 1:30 Cooling - 1:30

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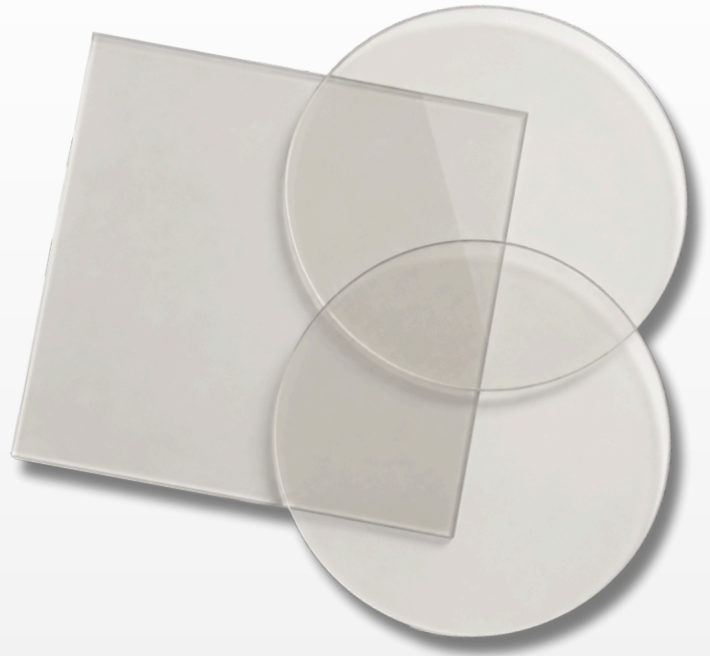


Coping Material

(POLYPROPYLENE)

Use for: Temporary Crown & Bridge Forms, Retainers for Bruxers, Bleach Trays, Copings, Templates

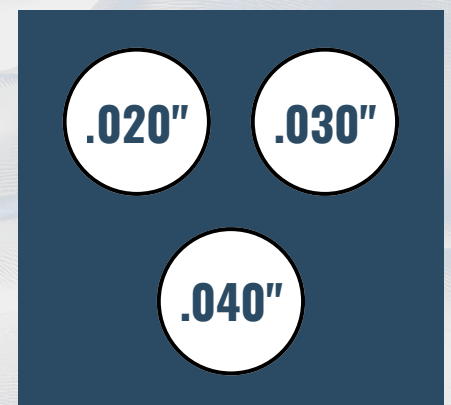
- ✓ Cloudy, opaque material
- ✓ No protective masking
- ✓ Will NOT bond with acrylic
- ✓ BPA, latex, gluten & monomer free



FORMING GUIDELINES

THICKNESS	.020" 0.5MM	.030" 0.75MM	.040" 1.0MM
BioSTAR	Code 113	Code 143	Code 163
MiniSTAR	Code 123	Code 153	Code 173
MiniSTAR S	Code 123	Code 153	Code 173
Drufomat	Heating - 1:05 Cooling - 1:15	Heating - 1:15 Cooling - 1:25	Heating - 1:30 Cooling - 1:30

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Mouthguard Material

(SOFT EVA)

Use for: Sports Guards, Bleaching Trays, Soft Splints, Night Guards, Custom Floride Trays

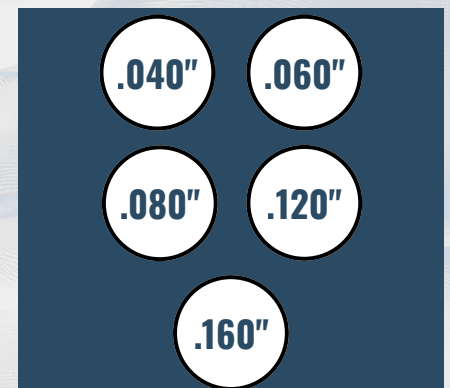
- ✓ Protective blue masking on both sides
- ✓ Remove masking prior to forming
- ✓ BPA, latex, gluten & monomer free



FORMING GUIDELINES

THICKNESS	.040" 1.0MM	.060" 1.5MM	.080" 2.0MM	.120" 3.0MM	.160" 4.0MM
BioSTAR	Code 123	Code 154	Code 184	Code 234	Code 264
MiniSTAR	Code 123	Code 154	Code 184	Code 234	Code 264
MiniSTAR S	Code 123	Code 144	Code 164	Code 204	Code 244
Druformat	Heating - 1:00 Cooling - 1:20	Heating - 1:00 Cooling - 1:20	Heating - 1:05 Cooling - 2:00	Heating - 1:50 Cooling - 4:00	Heating - 2:10 Cooling - 5:00

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Colored Mouthguard Material

(SOFT EVA)

Use for: Sports Guards

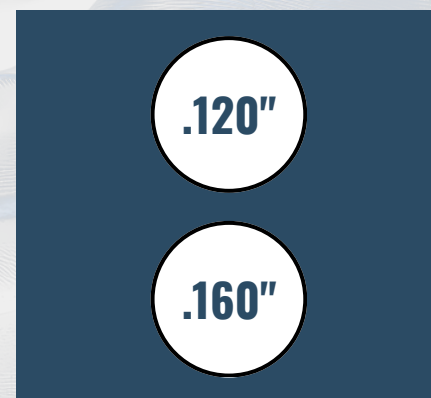
- ✓ No protective masking
- ✓ Available colors: Red, Blue, White, Black
- ✓ BPA, latex, gluten & monomer free



FORMING GUIDELINES

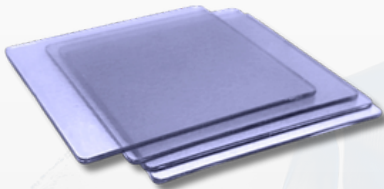
THICKNESS	.120" 3.0MM	.160" 4.0MM
BioSTAR	Code 234	Code 264
MiniSTAR	Code 234	Code 264
MiniSTAR S	Code 204	Code 244
Drufomat	Heating - 1:50 Cooling - 4:00	Heating - 2:35 Cooling - 5:30

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Assorted Laminates

PRO-FORM[®] DUAL LAMINATE



Use for: Occlusal Splints, Night Guards, Bruxism

- ✓ .080" (2MM) | .120" (3MM) | .200" (5MM)
- ✓ Purple tinted material
- ✓ Two pre-laminated layers of E.V.A. & PETG
- ✓ Acrylic will bond to the hard surface
- ✓ No protective masking
- ✓ BPA, latex, gluten & monomer free

DREVE[®] KOMBIPLAST DUAL LAMINATE



Use for: Occlusal Splints, Night Guards, Bruxism

- ✓ .080" (2MM) | .120" (3MM) | .200" (5MM)
- ✓ Highly transparent
- ✓ Two pre-laminated layers of E.V.A. & PETG
- ✓ Acrylic will bond to the hard surface
- ✓ Protective masking, form with masking on
- ✓ BPA, latex, gluten & monomer free

PRO-FORM[®] LAMINATES



Use for: Sports Guards

- ✓ .160" (4.0MM)
- ✓ Two pre-laminated layers of E.V.A.
- ✓ Available in a variety of solid, dual, tri, and tie-dye colors
- ✓ No protective masking
- ✓ BPA, latex, gluten & monomer free

NITEGUARD LAMINATES



Use for: Night Guards

- ✓ .120" (3.0MM)
- ✓ Two pre-laminated layers of soft material
- ✓ More abrasion-resistant than single layer E.V.A.
- ✓ No protective masking
- ✓ BPA, latex, gluten & monomer free

Application Guide

USE THIS GUIDE TO QUICKLY IDENTIFY WHICH MATERIALS ARE BEST SUITED FOR EACH APPLICATION

	Aligners	Retainers	Bruxism Management	Bleaching Trays	Splints	Nightguards	Sportsguards	Temp Crown & Bridge	Copings	Templates	Will bond w/ acrylic
Tru-Tain DX	✓	✓									✓
Surgical Splint		✓		✓	✓	✓					✓
Coping Plus	✓	✓	✓	✓				✓	✓		
Coping Material		✓	✓	✓				✓	✓	✓	
Tru-PU	✓										
Mouthguard				✓		✓	✓				
Pro-Form Laminates							✓				
Dual Laminates			✓		✓	✓					✓
Dreve® Kombiplast			✓		✓	✓					✓
Niteguard Laminates						✓					

Note: A checkmark indicates applications supported by current product information as of this guide's issue date. Blank cells indicate that an application is not identified in this chart and should not be interpreted as confirmation of suitability or incompatibility.

This application guide is intended as a quick reference only and is not a substitute for current product-specific Instructions for Use, fabrication instructions, Safety Data Sheets or thermoforming-equipment instructions. Material selection and forming results may vary based on the application, material thickness, appliance design, model and equipment. Verify current product documentation before use.