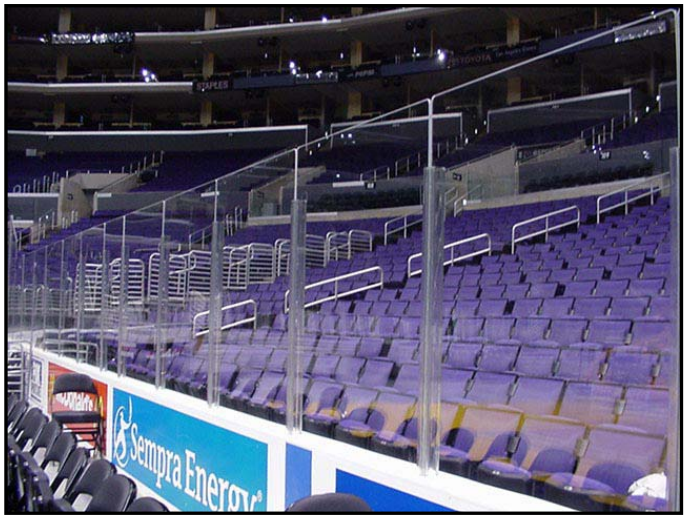
ACRYSPORT ARENA GLAS –

ACRYSPORT ARENA GLAS is a TEC-2000 sister product that gives you the strength of TEC-2000 with the slick properties of the ACP NOXTAT OPTEC lens Coating. Our ACRYSPORT ARENA GLAS is scratch and abrasion resistant with the broadest range of chemical and solvent resistance available. ACRYSPORT ARENA GLAS is a transparent coating typically applied from 4 to 6 microns thick.



Applications

ACRYSPORT ARENA GLAS can be used in almost any sports application where high impact and maximum durability is a requirement

Impact tests- Substrate

Impact Resistance of ACRYSPORT ARENA GLAS and Other Materials

Material	Nominal Thickness (in)	Nominal Thickness (mm)	Weight of Free Falling Steel Ball (lb)	F50 Energy to Break (ft-lb)
ACRYSPORT ARENA GLAS	.236	6.0	5.00	18.1
Single-Strength Window Glass	.100		0.25	0.8
Double-Strength Window Glass	.125		0.25	1.8
Plate Glass	.187		0.25	2.0
Plate Glass	.250		0.25	1.0
Laminated Safety Glass	.250		0.25	1.1
Rough Wire Glass				
Impact Rough Side	.250		0.25	2.2
Impact Smooth Side	.250		0.25	0.2
Polished Wire Glass	.250		0.25	0.4

Impact Tests- Coating

Room Temperature Impact (1 inch steel ball dropped 50 inches onto coated sheet)
Result: No fracture, chipping or crazing of coating

Low Temperature Impact (After conditioning at -40°C, ± 1°C for not less than 4 hours, drop 1 inch steel ball, 50 inches onto front surface of sheet)
Result: No fracture, chipping or crazing of coating

Typical Product Data:

The **ACRYSPORT ARENA GLAS** process results in no less than the following minimum specifications:

Luminous Transmittance

Type I – (Clear) 85% Minimum Transmittance
Type II – (Tinted) 17% to 23% Transmittance

Haze - <2% Maximum Average

Defects – No defects larger than +/- 10% of substrate manufacturers specifications (pits, bubbles, inclusions, embedded foreign matter.

Abrasion Tests

Taber Abrasion Test (with 500 g. load on each wheel @ 1000 cycles. Haze % measured ASTM D 1003-6L.)
Result: 3.0-7.0 Δ Haze

Steel Wool Test (with #0000 Steel Wool Pad, 1.12" D @ 25psi & 5 cycles.)
Result: 1.0 Δ Haze

Summers Optical Coating Hardness Test, 2 ½ Pound
Result: <2% Δ Haze

Environmental Tests

Water Immersion Test (in tap water @ 65°C.)
Result: 500+hours with no cracking or loss of adhesion.

QUV Exposure Test (on QUV instr. Manuf. By Q Panel Corp. Cycle = 8 hrs. Uv @ 70°C & 4 hrs cond. Humidity @50°C.)
Result: 400+hours with no cracking or loss of adhesion.

RS Sunlamp Exposure Test
Result: 800+ hours with no cracking or loss of adhesion.
UV Light Yellowness Index Test (after 500 hrs. of QUV.)
Result: Index = 1-4

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Haze after Boiling (Placed in boiling water for no less than 2 hours, then cooled for 1 hour)
Results: No evidence of peeling, <2% Δ Haze

Solvent Resistance Tests (with saturated cotton balls for 30 min).

Ethylene Glycol Anti-Freeze
Diesel Fuel
Gasoline
Heavy Duty Detergent
Heavy Duty Brake Fluid
Transmission Fluid (Type A)
Isopropyl Alcohol
Acetone
Result: <2% Δ Haze

Chemical Resistance Tests (applied and allowed to stand for no less than 6 hours)

Liquid Nerve Gas Agent GB
Liquid Nerve Gas Agent HD
Result: <2% Δ Haze

Expansion-

Thermal Expansion/Contraction and Rigidity Comparison of ACRYSPORT ARENA GLAS vs. Other Building Materials		
Material	**Expansion Coefficients ("/"/°F)**	**Typical Modulus (psi)**
ACRYSPORT ARENA GLAS	0.0000410	450,000
Aluminum	0.0000129	10,000,000
Steel	0.0000063	30,000,000
Plate Glass	0.0000050	10,000,000

Weight-

ACRYSPORT ARENA GLAS is less than 50 percent as heavy as glass and 43 percent as heavy as aluminum.

Weight of ACRYSPORT ARENA GLAS	
Thickness (in)	**Weight (lbs/sq ft)**
0.118	**0.74**
0.177	**1.10**
0.236	**1.48**
0.472	**2.96**

- Call or email us for free samples of **ACRYSPORT ARENA GLAS**
- Call or email us for the distributor nearest to your facility
- Call or email for availability

CALL 1-714-444-4090
EMAIL – info@noxtat.com