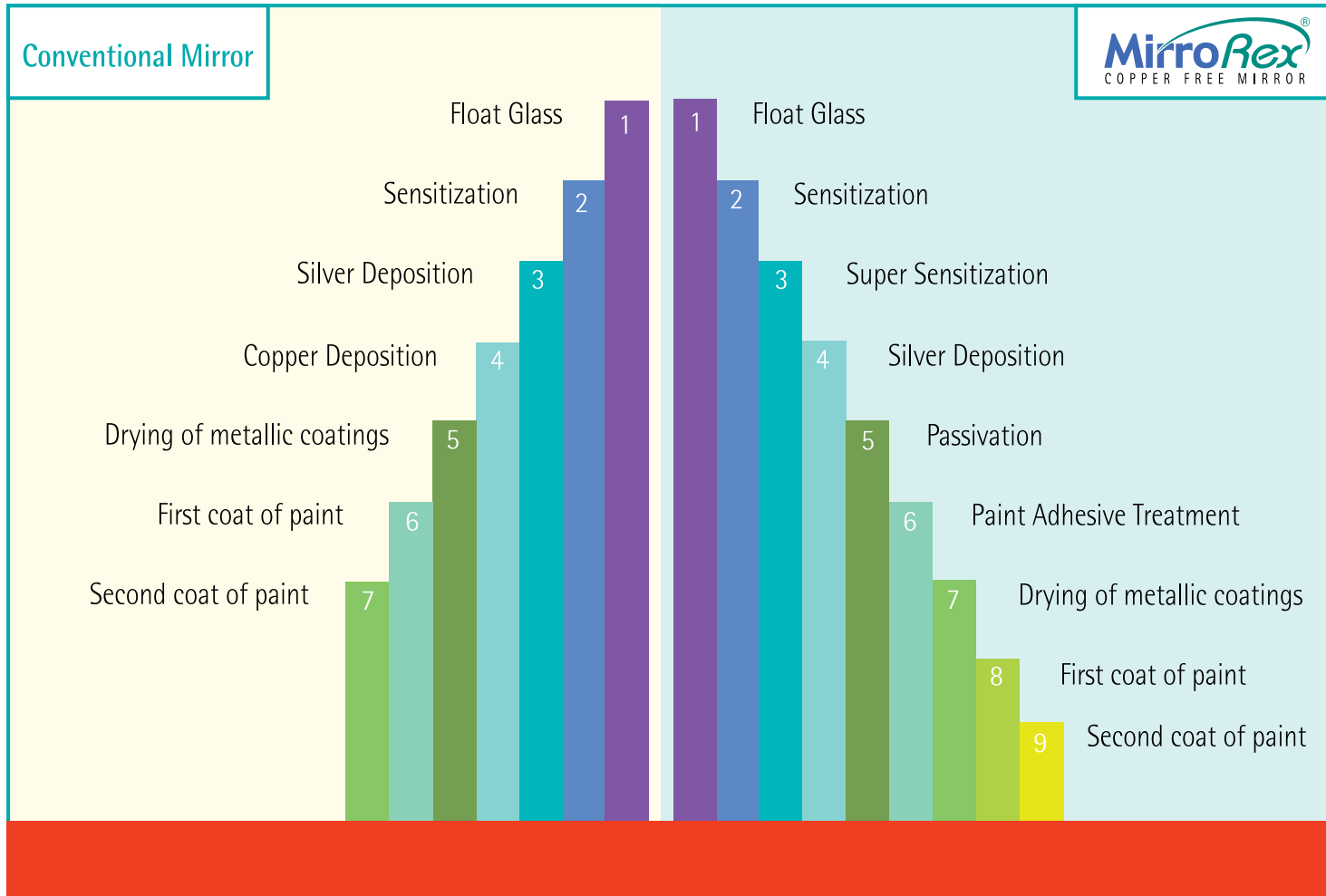




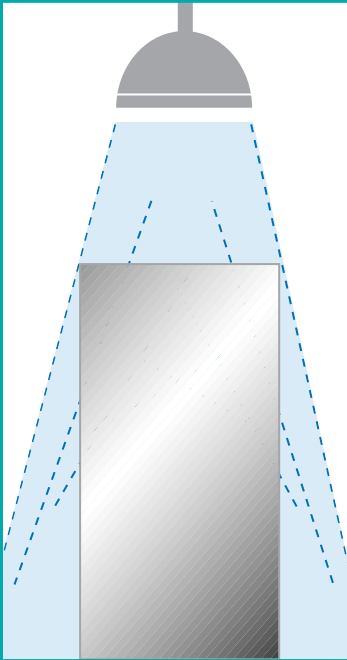
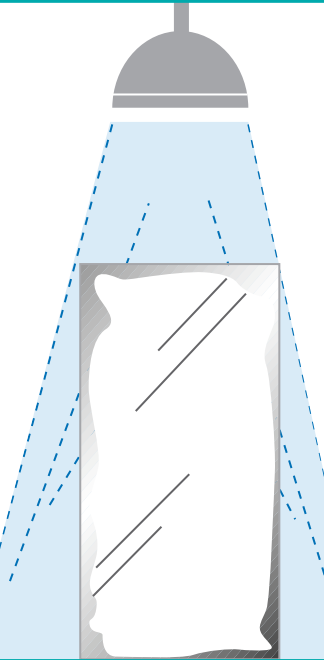

Production Procedures



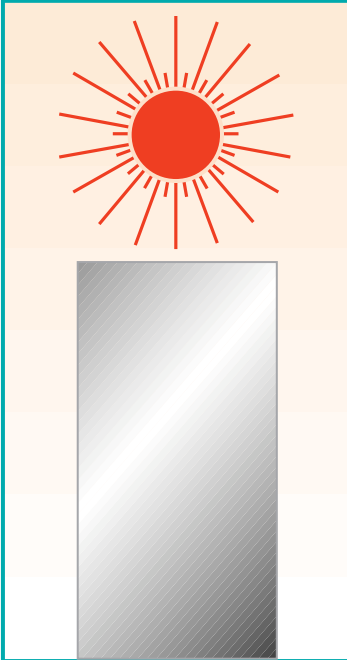
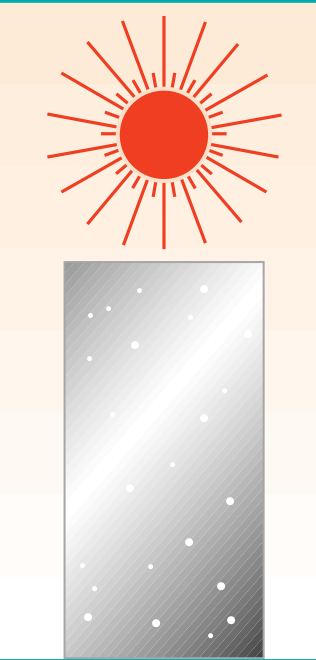

Production Procedures Compare with Other Mirrors

	MirroRex Copper Free Mirror	Other Copper-free Mirror	Typical Conventional Mirror
Washing	✓	✓	✓
Scrubbing *	✓		
Polishing	✓	✓	✓
Rinsing	✓	✓	✓
* A patented mirror production process from Bovone. Improving the quality of mirrors by using the oxidized cerium to remove stains and spots in glass to enhance the effect of reflection.			
Sensitization	✓	✓	✓
Super Sensitization *	✓		
* Use palladium to improve the adhesion of silver film to glass substrate.			
Silver Deposition	✓	✓	✓
Passivation *	* ✓	✓	
* Rinsed with deionized water. Through the 'Copper-free' production to protect the silver film from oxidizing.			
Paint Adhesive Treatment	✓	✓	
Drying of metallic coatings	✓	✓	✓
Application of first coat of paint	Unleaded	Leaded/Unleaded	Leaded/Unleaded
First Coat Baking	* ✓	✓	✓
Application of second coat of paint	Unleaded	Leaded/Unleaded	Leaded/Unleaded
Second Coat Baking	* ✓	✓	✓
* Use Infra-red (golden type) to change the structure of paint for enhancing the adhesive effect.			

ASTM C 1503-01 (US Standard) Salt Spray Test - 20%

No damage after 300 hours	Severe damage after 300 hours
	
	Conventional Mirror

Heat Test - 160 Degrees F (71C)

No clouding after 10 days	Severe clouding after 4 hours
	
	Conventional Mirror

Accelerated Testing Compare with Other Mirrors

	European Norm EN1036	Typical Conventional Mirror	MirroRex Copper Free Mirror
ISO 3768 CASS Test @120 Hours			
Maximum Edge Corrosion (um)	2500	500-1000	250
Spot Failures-number/sq dm.	2<3mm	3	≤ 1
	3<0.3mm		
ISO 3770 Salt Test @ 5%			
Maximum Edge Corrosion (um)	1500	300	100
Spot Failures-number/sq dm.	2<3mm	1	≤ 1
	5<0.3mm		
ASTM C 1503-01 Salt Spray Test - 20% US Spec for 300 Hours			
Maximum Edge Corrosion (um)	3000	500	200
Spot Failures-number/sq dm.	2<3mm	1	1
	5<0.5mm		
Max. Numbers of Spot Failures	5		
DIN 50017 Humidity Test - 480 Hours			
Maximum Edge Corrosion (um)	200	0	0
Appearance	No clouding of silver film	Clouding occurs in 3-4 days	No clouding of silver film
Ammonia Immersion (10%) - 240 Hours	No standard established	Paint delaminates in 3-5 hours	No paint delamination 10 days
Typical Edge Failure-2 Hours (um)	250	200	<50
Heat Test @ 160 Degrees F (71C)	No standard	Severe clouding after 4 hours	No clouding after 10 days
Heat Test @ 425 Degrees F (218C)	No standard	Severe clouding after 30 minutes	No clouding after 10 hours