

# Neutron Imaging Detectors

Also for the surface mirror (do not take a bathroom mirror!),  
the choice of reflecting material is important:

## Reflectivity of metal coatings

MICRONS	ALUMINUM	SILVER	GOLD	COPPER	RHODIUM	PLATINUM
0.38	92.5	92.8	37.8	44.5	78.1	64.9
0.4	92.4	94.8	38.7	47.5	77.4	66.3
0.45	92.2	96.6	38.7	55.2	76	69.1
0.5	91.8	97.7	47.7	60	76.6	71.4
0.55	91.5	97.9	81.7	66.9	78.2	73.4
0.6	91.1	98.1	91.9	93.3	79.7	75.2
0.65	90.3	98.3	95.5	96.6	81.1	76.4
0.7	89.9	98.5	97	97.5	82	77.2
0.75	88	98.6	97.4	97.9	82.6	77.9
0.8	86.3	98.6	97.7	98.1	83.1	78.5

## Space Optics Research Labs

The reflectivity of silver is best in the blue and green region, but silver becomes activated and oxidised, so aluminium is the choice!

Slide courtesy: Dr. Burkhard Schillinger (FRM-II, Munich, Germany)