

## Choosing a TEM Window Grid

	Amorphous Silicon	Porous Nanocrystalline Silicon	Silicon Dioxide	Silicon Nitride	Standard Carbon	Ultrathin Carbon
Actual Thickness(nm)	5, 9, 15	15	20 & 40	5, 10, 20, 50	20-50	~10
Image Quality	Excellent	Good	Ok	Good	Ok	Good
Plasma Cleanable	Yes	Yes	Yes	Yes	No	No
Elemental Analysis Background	Si Only	Si Only	Si, O	Si, N	C, H	C, H
Thermal Stability	~600C	>1000C	>1000C	>1000C	~400C	~400C
Chemical Stability	Avoid Strong Bases	Avoid Strong Bases	Good	Excellent	Good	Good
Tolerates High Beam Currents	Excellent	Excellent	Ok	Ok	Excellent	Excellent
Potential Contamination Source	None	None	None	None	Carbon	Carbon
Open Nanoscale Pores	No	Yes	No	No	No	No
Background	Feature-less	Nano-crystalline	Feature-less	Feature-less	Feature-less	Feature-less