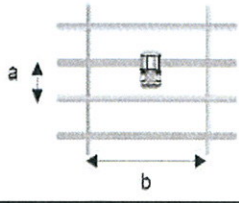
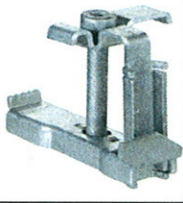






## Hilti Grating Fasteners - Selection Aid

					
<b>Product Designation</b>	<b>X-MGR M/W60</b>	<b>X-GR</b>	<b>X-GR-RU</b>	<b>X-FCM-M &amp; X-CRM8</b>	<b>X-FCM-R &amp; X-BTM8</b>
<b>Installation Speed: fastening/ hour</b>	180	600	240	120	100
<b>Application Range Covered by Available Products</b>					
<b>Grating-Mesh [mm]</b> a (min-max) b (min-max)	25-30 30-100	25-30 30-100	19-30 30-100	18-40 18-100	18-40 18-100
<b>Grating-Height [mm]</b>	25-40	25/30/1-1/4"/35/ 1-1/2"/40	25-40	25-50	25-50
<b>Load-values Nrec [kN]</b>	0.6	0.6	0.8	1.0 - 1.8 (mesh dependend)	1.0 - 1.8 (mesh dependend)
<b>Base Mat. Limits [mm]</b> S235 (ST37) S355 (ST52)	3 - 25 3 - 25	4-12* 4-9*	4-12* 4-9*	6-12 6-9	8 - (no upper limit) 8 - (no upper limit)
<b>Corrosion and Vibration Resistance</b>					
<b>Material</b>	HDG	Duplex & Stainless	Duplex & Stainless	Duplex & Stainless	Stainless & Stainless
<b>Corrosion Resist. Class</b>	C3	C3	C3	C3	C5
<b>Indoor &amp; Outdoor</b>	✓✓	✓✓	✓✓	✓✓	✓✓
<b>Offshore/ Marine</b>	No	No	No	No	✓✓
<b>Vibration Resistance</b>	✓**	✓✓	✓✓	✓✓	✓✓
<b>Vehicle traffic</b>	No	No	No	No	No
<b>Approvals</b>					
<b>Approvals</b>	—	—	—	ABS, LR, (DNV, GL)***	DNV, ABS, LR, GL
<b>Recommended/ Required Equipment</b>					
<b>Installation Tool:</b>	SF 144	DX 460	DX 460 + SF 144	DX 460 + SF 144	DX 351 + SF 144
<b>Cartridge Colour</b>	N/A	black	black	red	brown
<b>Tightening Torque [Nm]</b>	5-8	N/A	3-5	5-8	5-8
<b>Torque Clutch Level:</b>	4-7	N/A	2-5	4-7	4-7
<b>In a Nut Shell</b>					
<b>Which product is the best for the customer?</b>	<b>Small projects; DX is not allowed</b>	<b>Removability not needed or not allowed</b>	<b>Should be first choice when not offshore</b>	<b>Premium alternative to X-GR-RU &amp; X-GR</b>	<b>The Must Have when offshore; on coated base material</b>
<b>Notes:</b>					
* No upper limit with pre-drilling solution using TX-GR-RU 3.4/10.5-110 (please note energy level adjustment down to Level 1 when using pre-drilled method)					
** Allows lateral movement and hence not considered as fully resistant as DX based solutions					
*** Applicable for X-FCM-M, not X-CRM8					