

**ND.2 Form A – Schedule for the specification requirements of designed mixes**

**Corrected Mix 2 parameters**

Mix 2 requirements are not consistent through all parameters specified (contradictions exist). The most onerous values must be applied.

<p><b>1. Mix reference</b></p> <p>NOTES: The specified values for strength class, minimum cement content and maximum water/cement ratio must be consistent with the recommended limiting values of the most onerous exposure class specified, as given in Tables NA.5, NA.6 &amp; NA.7 of the National Annex to I.S. EN 206. Any combination of cement plus addition (e.g. GGBS), if specified, must comply with requirements set out in these Tables for the combination or 'equivalent' cement type.</p>		<p><i>Example Mix 2</i></p>	<p><i>Mix 2A -Mix 2 corrected</i></p>
<p><b>2. Strength class</b></p>		<p><i>C30/37</i></p>	<p><i>C30/37</i></p>
<p><b>3. Nominal maximum size of aggregate, in mm (D)</b></p>		<p><i>20 mm</i></p>	<p><i>20 mm</i></p>
<p><b>4. Types of aggregate</b></p> <p>Coarse Other (specify requirements) Fine Other (specify requirements)</p>	<p>I.S. EN 12620  I.S. EN 12620</p>	<p><i>Aggregates to comply with I.S. EN 12620</i></p>	<p><i>Aggregates to comply with I.S. EN 12620</i></p>
<p><b>5. Cement type(s) complying with:</b> (Select from Tables NA.2 and NA.3. For key to abbreviations see Table ND.1)</p>	<p>CEM I N CEM I R CEM I/SR CEM II/A-L (or A-LL) CEM II/A-V CEM II/B-V CEM II/A-S CEM II/B-S CEM II /A-M (S-V) CEM II /A-M (V-L) CEM II /B-M (S-L) CEM II /B-M (S-V) CEM III/A CEM III/B</p>	<p><i>CEM II/A-L or CEM I</i></p>	<p><i>CEM II/A-L or CEM I</i></p>
<p><b>6. Additions complying with</b> (Refer to NA.2.7. See Table ND.2 for key to abbreviations)</p>	<p>pfa ; ggbs</p>	<p><i>50 % GGBS</i></p>	<p><i>66 - 70% GGBS</i> ✓</p>
<p>Recommended limiting values from Table NA.7 (Irish NA to EN 206) for Sulfate class/Exposure class XA2 specifies a GGBS content in the range 66 - 70%</p>			
<p><b>7. Sulfate class, if applicable</b></p>	<p>XA 1 / 200 - 600 SO<sub>4</sub><sup>2-</sup> XA 2 / 600 - 1400 SO<sub>4</sub><sup>2-</sup> <u>XA 2 / 1400 - 3000 SO<sub>4</sub><sup>2-</sup></u> XA 3 / 3000 - 6000 SO<sub>4</sub><sup>2-</sup></p>	<p><i>XA 2</i></p>	<p><i>XA 2</i></p>
<p><b>8. Exposure Class</b> (as in I.S. EN 206) (or combinations)</p>	<p>X0 XC1, XC2, XC3, XC4 XS1, XS2, XS3 XD1, XD2, XD3 XF1, XF2, XF3, XF4 XA1, XA2, XA3</p>	<p><i>XC2, XA2</i></p>	<p><i>XC2, XA2</i></p>

<b>9. Chloride Class</b>	Cl 1.0 Cl 0.40 Cl 0.20 Cl 0.10	0.40	0.40
<b>10. Minimum cement content, kg/m<sup>3</sup></b>		320	340 ✓
Recommended limiting values from Table NA.7 (Irish NA to EN 206) for Sulfate class/Exposure class XA2 specifies a minimum cement content of 340 kg/m <sup>3</sup>			
<b>11. Maximum free water / cement ratio</b>		0.55	0.5 ✓
Recommended limiting values from Table NA.7 (Irish NA to EN 206) for Sulfate class/Exposure class XA2 specifies a maximum water/cement ratio of 0.50			
<b>12. Quality assurance requirements</b>		N/A	N/A
<b>13. Rate of sampling intended by the purchaser for strength testing (for information)</b>		N/A	N/A
<b>14. Other requirements</b> (alkali, etc. as appropriate)		N/A	N/A
In the case of fresh concrete the following should be completed by the purchaser.			
<b>15. Consistence</b> (Choose one method) Slump Class Compaction Class Flow Class	S1, S2, S3, S4, S5 C0, C1, C2, C3 F1, F2, F3, F4, F5, F6	S3 (range 100 - 150 mm)	S3 (range 100 - 150 mm)
<b>16. Method of placing</b> (for information)		Pump	Pump
<b>17. Other requirements</b> by the purchaser of fresh concrete (only if appropriate)		N/A	N/A