X-UCT P27 Universal Cable Tie Holder

**Features and benefits**
The X-UCT P27 is an universal cable tie holder, able to hold multiple cable ties, and it is optimized for stick rate in applications on soft & tough concrete.

**General information**

**Material specification**
- **Cable Tie Holder**: HDPE
  - halogen and silicon free
  - Black RAL 9005
- **Nail**:
  - Carbon Steel 59 HRC
  - 4mm shank diameter
  - Long Conical Tip
  - Zinc Coating 5–20 µm

**Recommended fastening tools**
- DX 2, DX 5 F8, DX 36, DX 351 F8, DX 351-CT, DX 460 F8

**Applications**

**Example**

Time-saving, reliable and versatile fastener for multiple cable ties on soft & tough concrete
Performance data

<table>
<thead>
<tr>
<th>Fastener</th>
<th>Concrete Toughness</th>
<th>Recommended Loads [kN]</th>
<th>Typical cartridge colour selection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Soft</td>
<td>0.04</td>
<td>Green / Yellow</td>
</tr>
<tr>
<td>X-UCT P27</td>
<td>Tough</td>
<td>0.04</td>
<td>Red</td>
</tr>
</tbody>
</table>

Design Conditions:

- The recommended load is controlled by serviceability of the plastic part.
- For safety relevant fastenings sufficient redundancy of the entire system is required: Minimum of 5 nails per application. All visible setting failures must be replaced.
- Soft concrete up to $f_{c,cube} = 45 \text{ N/mm}^2$, Tough concrete up to $f_{c,cube} = 65 \text{ N/mm}^2$.
- Concrete with aggregate like granite or river rock or softer, and up to 16 mm diameter

Stick rate estimation

<table>
<thead>
<tr>
<th></th>
<th>Soft Concrete</th>
<th>Tough Concrete</th>
</tr>
</thead>
<tbody>
<tr>
<td>95% – 99%</td>
<td></td>
<td>90% – 95%</td>
</tr>
</tbody>
</table>

- The stick rate indicates the percentage of nails that were driven correctly to carry a load.
- Stick rate can vary from the above values depending on job site conditions.

Application requirements

Thickness of base material

Concrete:

$h_{\text{min}} = 80 \text{ mm}$

Edge distance and fastener spacing

Edge distance: $c \geq 70 \text{ mm}$
Spacing: $s \geq 100 \text{ mm}$

50–100 cm along the cable tie. Adjust spacing as needed to achieve stability of cable tie

Application requirements

These zinc-coated fasteners are not suitable for long-term service outdoors or in otherwise corrosive environments. For further detailed information on corrosion see relevant chapter in Direct Fastening Principles and Technique section.
Fastener selection

Suitable cables with X-UCT P27

<table>
<thead>
<tr>
<th>Cable type</th>
<th>Cable measure [Ø mm]</th>
<th>No. of cable</th>
</tr>
</thead>
<tbody>
<tr>
<td>NYM 3x1.5</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>NYM 5x1.5</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

Fastener program

<table>
<thead>
<tr>
<th>Fastener Designation</th>
<th>Item no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>X-UCT P27</td>
<td>2187805</td>
</tr>
</tbody>
</table>

System recommendation

Concrete: 6.8/11M green or yellow cartridge on green/fresh and standard concrete
6.8/11M red cartridge on precast, old and hard concrete

Tool energy adjustment by setting tests on site.

Fastening quality assurance

\[ h_{NVS} = 6-11 \text{ mm} \]