INTRODUCING CUBIS PRODUCT LINES to our family of products

NEW NAME. RENEWED PROMISE.

CANADIAN COMMUNICATIONS Provider Upgrades Current System With CUBIS STAKKAbox™ ULTIMA with Composite Covers
NEW NAME.
RENEWED PROMISE.
Every day we drive progress. Every day we develop, manufacture and deliver solutions that help communities thrive. Without the work we do millions would not have access to life’s most vital resources. It’s time for us to recognize the work we do by taking on a new brand identity. One that includes a new name which more accurately reflects the breadth and impact of our products and services.

What you do, what our company does, and where we’re going extends far beyond the products we make. We’re seeing the future. We’re taking on an industry in order to build it better. And we’re connecting millions of people. We’re linking them to better quality products, more efficient systems, and the idea that massive impact might be right beneath their feet.

We are **Oldcastle Infrastructure.** Solving today. Transforming tomorrow.”

Over the course of 2019 you’ll begin to see changes nationwide in our plant network. To streamline and build on our new name, we’ll be updating the look and feel of our plants to match that of our new branding.

From signage, to stickers, to safety gear, and fleet Oldcastle Infrastructure, A CRH Company, will be the name you see across the country.
NEW NAME. RENEWED PROMISE.

Fleet Vehicles
INTRODUCING CUBIS PRODUCT LINES
to our family of products

Who is CUBIS?
The leading manufacturer of access chamber and ducting systems, used in the construction of infrastructure networks.

Ownership
CUBIS’ parent company is CRH plc, the international building materials group. Oldcastle is the North American arm of CRH that consists of: distribution, building products and materials

CUBIS Operational Markets

<table>
<thead>
<tr>
<th>SOUTH AMERICA:</th>
<th>EUROPE:</th>
<th>MIDDLE EAST:</th>
<th>ASIA:</th>
<th>AUSTRALASIA:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>UK</td>
<td>Israel</td>
<td>Japan</td>
<td>Australia</td>
</tr>
<tr>
<td>Chile</td>
<td>Austria</td>
<td>Qatar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uruguay</td>
<td>Belgium</td>
<td>Oman</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Poland</td>
<td>Saudi Arabia</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Denmark</td>
<td>UAE</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>France</td>
<td>Kuwait</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Germany</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ireland</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Turkey</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10 PRODUCTION SITES
$113 MILLION SALES
#1 CHAMBER MANUFACTURER IN EUROPE
571 STAFF
25 EXPORT COUNTRIES

PRODUCTION SITES
$113 MILLION SALES
#1 CHAMBER MANUFACTURER IN EUROPE
571 STAFF
25 EXPORT COUNTRIES
Market Sectors
CUBIS is active across five distinct market sectors in more than 25 countries.

Product Groups

- **STAKKAbox™ ULTIMA CONNECT**
  Stackable and structural access chamber system products, designed to accelerate construction builds

- **AX-S™ ACCESS COVERS**
  Access covers designed to suit a wide number of installation environments in every possible size

- **MULTIDUCT™ & RAILDUCT™**
  Lightweight structural products for use with buried cable infrastructure

Capabilities

- Experienced Product Design and Technical team
- Full Product Design to Production Service
- 3D CAD & Finite Element Analysis
- In-house Testing Facilities – Vertical & Sidewall Testing
- External Partners (Testing & Collaboration)
A major communications provider in Ottawa, ON, was faced with a deteriorating plastic pull box and found the flexibility needed with a new CUBIS chamber.

The communications provider uses pull boxes to access, splice, and store additional slack for fiber optic cables. The current plastic box needs replacing to allow for more cable storage and additional fiber lines. The solution, a 36”x60”x54” STAKKAbbox ULTIMA Connect system with composite covers. The unit was to be delivered flat-packed, unassembled, and constructed in the field.

The challenge faced was the existing fiber optic lines and conduit were going through three sides of the pull/splice box. Typically to replace the box without disturbing existing service, a large “mouse-hole” needs to be cut into the box to set over the existing cable. This usually compromises the integrity of the box and causes it to fail later. It is also not usually known exactly how deep the replacement box will need to be, so the flexibility of the CUBIS chamber to add additional layers for depth is a huge advantage.

The ULTIMA Connect system provided the flexibility to build the box as deep as required by adding additional layers.
Holes were cut in the layers, as it was built, to allow for existing fiber optic cable to pass through the box without affecting any lines in service and without impacting the integrity of the box. Another feature offered by CUBIS is load resistance well above ANSI/SCTE Tier 22.

The CUBIS system provided huge savings in installation time and minimizing any outages when upgrading/replacing a current pull box. Especially in confined urban environments with deteriorating equipment and infrastructure.

Benefits the customer realized during the project included:

1. Building the chamber in the field by hand with all lightweight components
2. Adjusting the number of layers to bring the final height to grade level
3. Core drilling and cutting the ULTIMA Connect components to allow for pass through of existing cable and conduit
4. As conduit or fiber optic lines are approached, the chamber components are easily cut with a saw to allow for building around the obstructions
5. The layers are built to the required final grade
6. Place frame and use screws to secure composite covers to the frame
7. Backfill around the chamber

The project was completed in the following steps:

1. Use excavator to dig a hole and remove existing box
2. Level ground below new chamber assembly
3. Build CUBIS chamber using components and connecting pegs, one layer at a time
4. As conduit or fiber optic lines are approached, the chamber components are easily cut with a saw to allow for building around the obstructions
5. The layers are built to the required final grade

Total project time came in around 4 hours, offering the customer a significant time savings to replace or upgrade pull/splice boxes quickly and without impacting the infrastructure in place.