

**CYCLE  
BOUTIQUE**

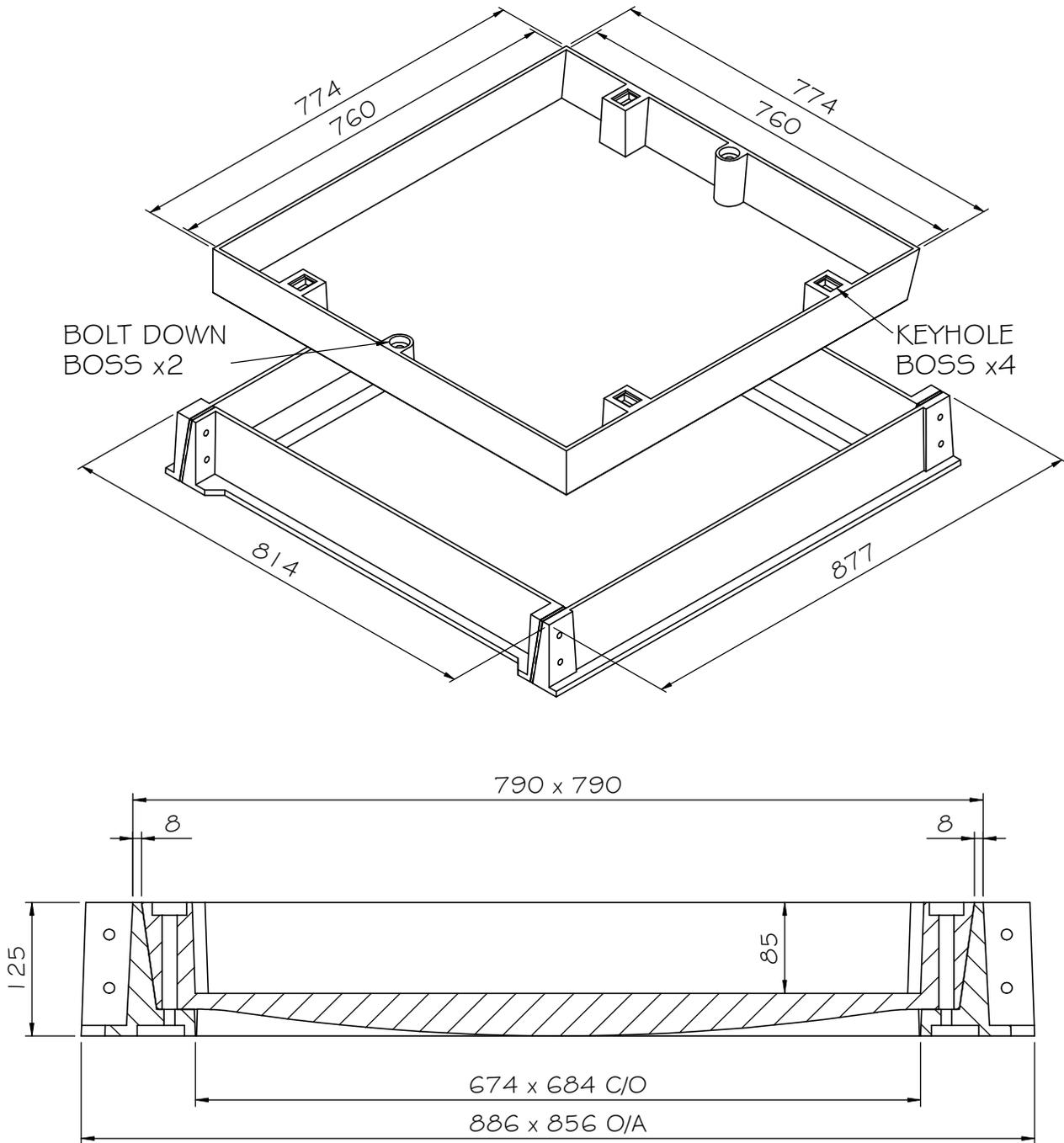


# DUCTILE IRON COVER & FRAME

## 85mm DEEP PAN

### CLASS D

Part# - 141736



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# SALES ILLUSTRATION



REF. No.	10/29
SERIES.	B
CHK'D.	

**ACO Polycrete Pty Ltd**

134-140 Old Bathurst Road, Emu Plains NSW 2750

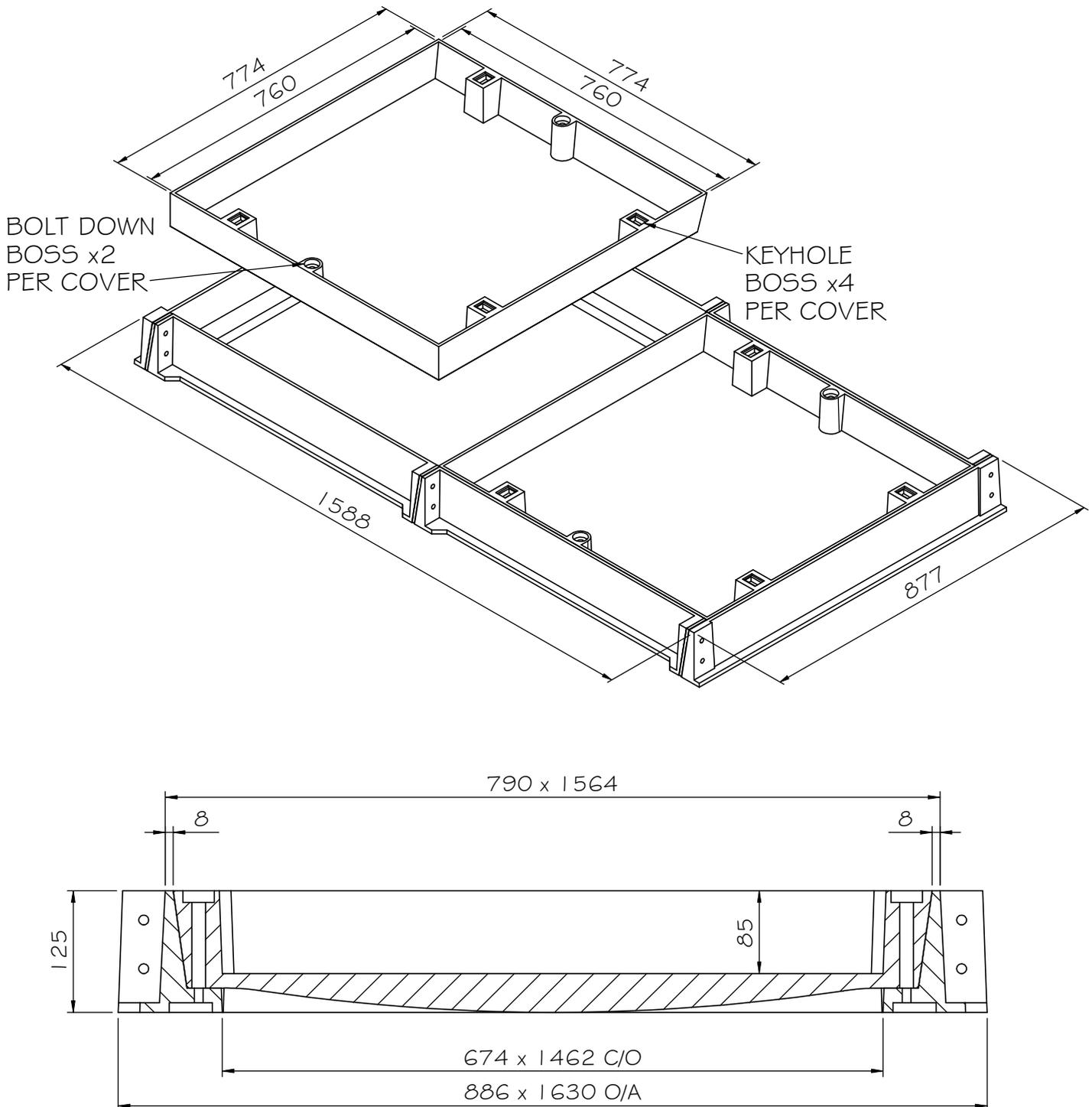
Tel: +61 2 4747 4000, Fax: +61 2 4747 4060, Website: [www.acoaus.com.au](http://www.acoaus.com.au)

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# DUCTILE IRON COVER & FRAME 2 PART 85mm DEEP PAN CLASS D

Part# - 141737



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## SALES ILLUSTRATION



REF. No.  
**10/40**  
SERIES. B  
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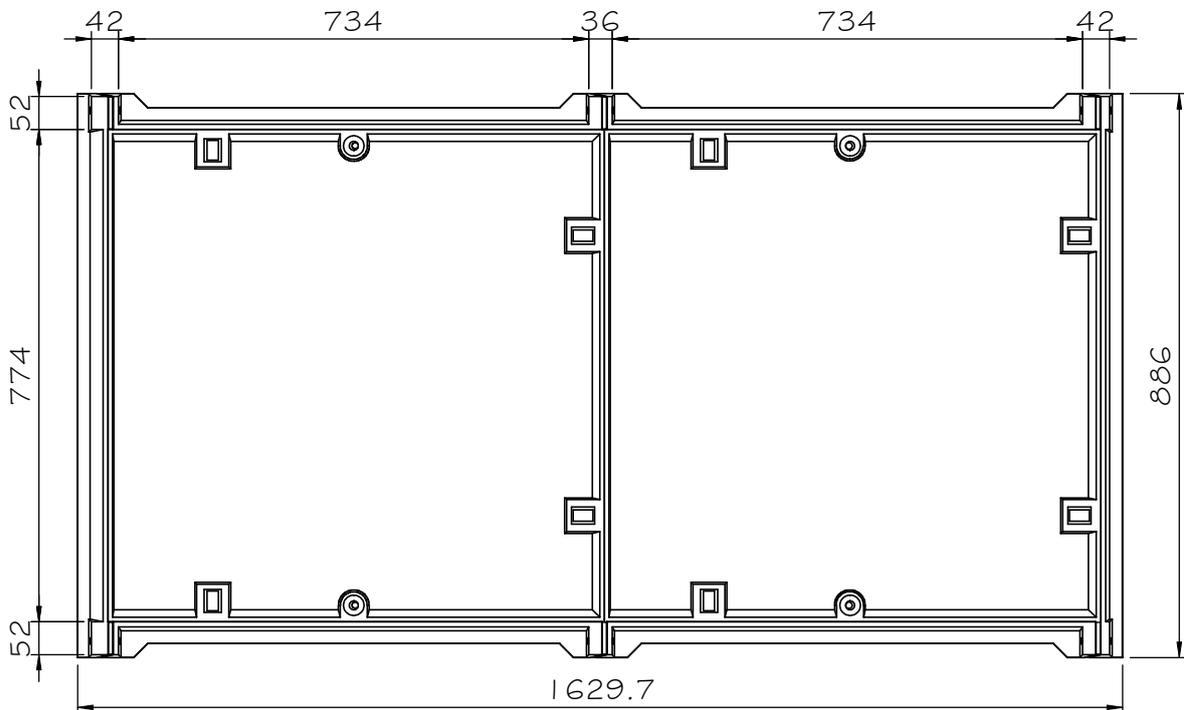
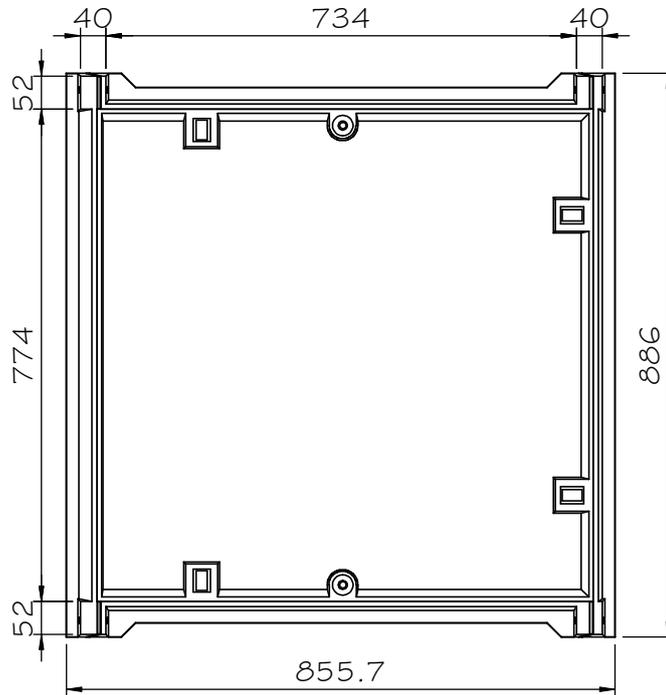
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# DUCTILE IRON COVER & FRAME CLASS D 85mm DEEP PAN SINGLE & 2 PART PLAN VIEW



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## SALES ILLUSTRATION



REF. No.  
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**CNSP Application Ref:  
040511\_004**

Chris McMahon,  
CNSP Administrator,  
CHORUS,  
19 Kaimiro Street, Pukete  
P.O. Box 9405, Waikato Mail Centre  
Hamilton, 3240  
Telephone 07-8345651  
Email chris.mcmahon@chorus.co.nz



**Chorus**

A Telecom New Zealand Business

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To: Tim Yandall  
Country Manager NZ  
ACO Polycrete Pty Ltd  
P.O.Box 15 444, New Lynn  
Auckland

Date: 17<sup>th</sup> May, 2011

Subject: Chorus Network Specified Product – Ductile Iron Infill cover and Frame

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With reference to CNSP application Number 040511-004, I am pleased to advise that your Ductile Iron Infill cover and Frame has been approved for use in the Telecom Network.

Your product has been entered onto the Chorus Network Specified Product (CNSP) list which is published on the Chorus website [www.chorus.co.nz](http://www.chorus.co.nz). The CNSP product reference section is 11.2 Footway Paver Infill Lids in section 11 –MH-Joint Chamber Covers.

You are reminded of your company's responsibility to ensure the product continues to meet the manufacturing and design specifications as supplied with the product application.

Chorus requires you to advise this office in writing of any proposed changes to the product, or your quality system, to enable Chorus to consider any impact to its Network.

Chorus reserves the right to remove your product from the CNSP list if it is deemed the product is no longer suitable for use by our contractors in the Telecom Network.

If you have any queries in relation to this approved application please contact me.

Yours faithfully  
Chris McMahon



**Chorus**

A Telecom New Zealand Business

# TEST REPORT



**Report Number:** 20110408-20-99208417  
**Report Date:** 18<sup>th</sup> April 2011  
**Prepared For:** ACO Sales

**ACO Range:** Access - Special  
**System:** Ductile Iron Infill Cover and Frame with 85mm Deep Pan  
**Part Number:** 99208417  
**Description:** Ductile iron infill cover and T frame tested unfilled. See photos.  
**Size**  
- clear opening 674mm x 688mm (Circular Opening – CO = 674mm)  
- overall 886mm x 856mm x 125mm depth  
**Drawing Number:** E124 Rev. E

**Test Date:** 8<sup>th</sup> April 2011  
**Specification:** AS 3996-2006 Access covers and grates  
**Procedure:** AS 3996-2006 Appendix C - Load Tests for Covers and Grates  
**Acceptance Criteria:** AS 3996-2006 Clause 4.2.1.2 Type Test for Class D (for CO=674mm)

**Test Equipment:**

- Test rig made of steel beams and plates
- Enerpac hydraulic ram with associated load cell and transducer D
- Digital gauge to measure deflection/permanent set

**Test Block Size:** 250mm Diameter

**Test Results:** **For Class D**

140kN – Serviceability Design Load (SDL)

6.07mm – Measured Deflection  
14.98mm – Maximum Deflection Limit = CO/45

Passed Class D deflection limit under the first application of the serviceability design load.

0.76mm – Measured Permanent Set  
1.35mm – Maximum Permanent Set = CO/500

Passed Class D permanent set limit after the fifth application of the serviceability design load.

# TEST REPORT



**Test Results cont.:** 210kN – Ultimate Limit State Design Load (ULSDL)

1.82mm – Permanent Set (No Limit)

After the final inspection, the cover showed no visible cracking collapse or other similar forms of structural failure.

Passed Class D requirements for one application of the ultimate limit state design load.

**Comments:** The ACO Ductile Iron Infill Cover and Frame with 85mm Deep Pan (Part No. 99208417) satisfied all the requirements as specified in AS 3996-2006 Clause 4.2.1.2 for Class D.

**Testing Officer:** John Gullotta

**Darren Chan**  
Approved Signatory  
ACO Polycrete Pty Ltd



Photo A – Test Setup



Photo B – Top of Cover



Photo C – Underside of Cover



Photo D – Load Bar Arrangement

20110408-20-99208417

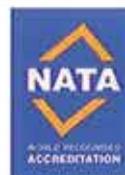
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