



**Hong Kong Curtain Wall Testing Centre Ltd.**

香港幕牆檢測中心有限公司

**ADDRESS** : Unit 8, 16/F, Grandtech Centre, No.8 On Ping Street, Shatin,  
地址 New Territories, Hong Kong  
香港新界沙田安平街8號偉達中心16樓8室

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**CLIENTELE** : Public  
服務對象 公眾



Scope of Accreditation  
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**ADDRESS**

**地址**

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New Territories, Hong Kong  
香港新界沙田安平街 8 號偉達中心 16 樓 8 室
- Hong Kong Branch  
Laboratory (Fanling)** : DD77, Lot 328, Ping Yuen Road, Ping Che, Fanling, New Territories, Hong Kong  
香港新界粉嶺坪輦坪原路 DD77, 328 地段
- Shenzhen Test Location** : 深圳市龍崗區寶龍街道同德社區嚇坑大地工業區 13 號晶南星廠 C 棟 101
- ACCREDITED TEST  
CATEGORY** : Construction Materials 建築材料
- 認可測試類別**

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**Construction Materials 建築材料**

ITEM TESTED OR MEASURED 測試或量度項目	SPECIFIC TEST OR PROPERTY MEASURED 特定測試或量度的特性	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED 規範、標準方法或應用技術
<p>Welds (non-destructive)</p>	<p>Liquid penetrant test (Colour contrast method)</p> <p>Magnetic particle test (magnetic flow method color contrast technique using permanent magnets and A.C. yokes)</p> <p>Ultrasonic test (Butt welds in plates &amp; pipes, 'T' joint welds, nozzle welds and node welds)</p> <p>Visual examination</p>	<p>BS 6443: 1984 + Amd. 4844            BS EN 571-1: 1997            BS EN ISO 3452: 2013            in conjunction with the following specification(s):            BS EN ISO 5817: 2014 Table 1            Buildings Department Code of Practice for the Structural Use of Steel (2005) Table 14.3b            Buildings Department Code of Practice for the Structural Use of Steel (2011) Table 14.3b</p> <p>BS 6072: 1981 (1986)            BS EN 1290: 1998            BS EN ISO 9934-1: 2001 + A1: 2003            BS EN ISO 9934-1: 2016            ISO 9934-1: 2000 (2003)            BS EN ISO 17638: 2009            BS EN ISO 17638: 2016            in conjunction with the following specification(s):            BS EN ISO 5817: 2014 Table 1            Buildings Department Code of Practice for the Structural Use of Steel (2005) Table 14.3b            Buildings Department Code of Practice for the Structural Use of Steel (2011) Table 14.3b</p> <p>BS 3923: Part 1: 1986 (Examination Level, 1, 2a, 2b &amp; 3)            BS EN 1714: 1998 (Testing Level A, B &amp; C)            BS EN ISO 17640: 2010 (Testing Level A, B &amp; C)            BS EN ISO 17640: 2018 (Testing Level A, B &amp; C)            in conjunction with the following specification(s):            BS EN ISO 5817: 2014 Table 1            Buildings Department Code of Practice for the Structural Use of Steel (2005) Table 14.3b            Buildings Department Code of Practice for the Structural Use of Steel (2011) Table 14.3b</p> <p>BS 5289: 1976            BS EN 970: 1997            BS EN ISO 17637: 2011            BS EN ISO 17637: 2016            in conjunction with the following specification(s):            BS EN ISO 5817: 2014 Table 1            Buildings Department Code of Practice for the Structural Use of Steel (2005) Table 14.3b            Buildings Department Code of Practice for the Structural Use of Steel (2011) Table 14.3b</p>

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Curtain walls	Air leakage rate	ASTM E283-04 (Reapproved 2012) AS/NZS 4284: 2008 Cl. 8.4
	Cyclic safety test for curtain wall system	Buildings Department APP-37 (May 2012) App. B Buildings Department Code of Practice for Structural Use of Glass (2018) Table 8.1
	Static test to seismic and wind interstory drifts	AAMA 501.4: 2009 AS/NZS 4284: 2008 Cl. 8.9
	Structural performance by uniform static air pressure difference	ASTM E330-02 (Reapproved 2010) ASTM E330/E330M-14 AS/NZS 4284: 2008 Cl. 8.2, 8.3 & 8.8
	Water penetration test by cyclic static air pressure difference	ASTM E547-00 (Reapproved 2016) AS/NZS 4284: 2008 Cl. 8.6
	Water penetration test by dynamic pressure	AAMA 501.1: 2005
	Water penetration test by uniform static air pressure difference	ASTM E331-00 (Reapproved 2016) AS/NZS 4284: 2008 Cl. 8.5
	Wind resistance test	BS 5368-3: 1978, EN 77: 1977

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Dimension stones	Absorption and bulk specific gravity  Compressive strength  Flexural strength  Modulus of rupture  Strength of individual stone anchorage	ASTM C97/C97M-09  ASTM C170/C170M-09  ASTM C880/C880M-09  ASTM C99/C99M-09  ASTM C1354/C1354M-09 excluding Cl. 9.6
Glass	Bending strength of glass  Bending strength of laminated glass at elevated temperature 50°C  Boil test of laminated glass  High-temperature test  Impact performance requirements for flat safety glass and safety plastics for use in buildings  Non-destructive photoelastic measurement of surface stresses in annealed, heat-strengthened and fully tempered flat glass	BS EN 1288-3: 2000  Buildings Department Code of Practice for Structural Use of Glass (2018) annex B1  ANSI Z97.1: 2004 Cl. 5.2 ANSI Z97.1: 2015 Cl. 5.3.2, 5.3.2(1) & 5.3.3 BS EN ISO 12543-4: 2011 Cl. 5 excluding 5.3.2 Buildings Department Code of Practice for Structural Use of Glass (2018) annex B2  BS EN ISO 12543-4: 2011 Cl. 5 excluding Cl. 5.3.3  BS 6206: 1981 + Amd. 8693 excluding Cl. 6 BS EN 12600: 2002  ASTM C1279-13 excluding Cl. 6.2 & 15.2 ASTM C1279-13 (Reapproved 2019) excluding Cl. 6.2 & 15.2

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Metallic Materials	Tensile test of metallic materials in the force range 1kN to 300kN	BS 18: 1987 BS EN 10002-1: 2001 BS EN ISO 6892-1: 2016 Method B in conjunction with the following specification(s): BS 1474: 1987 Cl. 6 BS EN 755-2: 1997 BS EN 10025-1: 2004 Cl. 10.2.1
Pipes  - Copper pipes & fittings	Dimensions and tolerances of copper and copper alloys (seamless) round copper tubes for water and gas in sanitary, and heating applications  Hydrostatic test of copper and copper alloys (seamless) round tubes for water and gas in sanitary and heating applications	In-house method TPM204 in conjunction with the following specification: BS EN 1057: 2006 + A1: 2010 Cl. 7.3.3 & 7.3.4  BS EN 1057: 2006 + A1: 2010 Annex C.2
Structural fixings	Shear proof load test of anchor bolts, dowel bars, channel insert and embed plate in the force range 0 kN – 600 kN  Tensile proof load test of anchor bolts, dowel bars, channel insert and embed plate in the force range 1 kN – 890 kN	BS 5080 Part 2: 1986 + Amd. 7602 Cl. 4, Cl. 6, Cl. 7.1, 7.2.1 and 7.2.3 with modification In-house method TPM019  BS 5080 Part 1: 1993 Cl. 6.7.1.1 and 7.1.3 with modification (by incremental loading) In-house method TPM017
Structural fixings (spiders)	Proof load test of spiders and glass fixing structural components in the force range 0 kN – 80 kN	Buildings Department APP-37 (May 2012) App. C Buildings Department APP-37 (May 2020) App. B Buildings Department APP-37 (Apr 2022) App. C Buildings Department Code of Practice for the Structural Use of Steel (2011) Cl. 16.2

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Welds (destructive)	Bend test on welds in metallic materials	BS EN 910: 1996 BS EN ISO 5173: 2010 + A1: 2011
	Fracture test on welds in metallic materials	BS EN 1320: 1997 BS EN ISO 9017: 2018
	Macroscopic examination on welds in metallic materials	BS EN 1321: 1997 BS EN ISO 17639: 2013
	Transverse tensile test on welds in metallic materials in the force range 1 kN to 300 kN	BS EN 895: 1995 BS EN ISO 4136: 2012





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Windows (cont'd)	Structural performance test	SS 212: 2007 Cl. 10.2.1.3 & Annex C
	Proof load test	SS 212: 2007 Cl. 10.2.1.6 & Annex D
	Durometer hardness test (Type A hardness only)	ASTM D2240-04 ASTM D2240-15
	Deflection test	AS 4420.2: 1996 in conjunction with the following specification: AS 2047: 1999 Cl. 2.3.1.3 NZS 4211: 2008 Cl. 6
	Air infiltration test	AS 4420.4: 1996 in conjunction with the following specification: AS 2047: 1999 Cl. 2.3.1.5 NZS 4211: 2008 Cl. 8
	Water penetration test	AS 4420.5: 1996 in conjunction with the following specification(s): AS 2047: 1999 Cl. 2.3.1.6 NZS 4211: 2008 Cl. 9
	Ultimate strength test	AS 4420.6: 1996 in conjunction with the following specification(s): AS 2047: 1999 Cl. 2.3.1.7 NZS 4211: 2008 Cl. 10

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Curtain walls	Air leakage rate  Cyclic safety test for curtain wall system  Static test to seismic and wind interstory drifts  Structural performance by uniform static air pressure difference  Water penetration test by cyclic static air pressure difference  Water penetration test by uniform static air pressure difference  Wind resistance test  建築幕牆抗風壓性能檢測方法  Air permeability / leakage test 建築幕牆氣密性能檢測方法  In-plane deformation 建築幕牆平面內變形性能檢測方法  Watertightness test 建築幕牆水密性能檢測方法	ASTM E283-04 (Reapproved 2012) AS/NZS 4284: 2008 Cl. 8.4  Buildings Department APP-37 (May 2012) App. B Buildings Department Code of Practice for Structural Use of Glass (2018) Table 8.1  AAMA 501.4: 2009 AS/NZS 4284: 2008 Cl. 8.9  ASTM E330-02 (Reapproved 2010) ASTM E330/E330M-14 AS/NZS 4284: 2008 Cl. 8.2, 8.3 & 8.8  ASTM E547-00 (Reapproved 2016) AS/NZS 4284: 2008 Cl. 8.6  ASTM E331-00 (Reapproved 2016) AS/NZS 4284: 2008 Cl. 8.5  BS 5368-3: 1978, EN 77: 1977  GB/T 15227-2007 Cl. 4.3  GB/T 15227-2007 Cl. 4.1  GB/T 18250-2000  GB/T 15227-2007 Cl. 4.2
Glass	Bending strength of glass	BS EN 1288-3: 2000

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Windows	<p>Air permeability / leakage test</p> <p>Dimension test - Overall size</p> <p>Endurance of fastener / hardware</p> <ul style="list-style-type: none"> <li>- Operation of fastener</li> <li>- Movement of sash</li> <li>- Resistance to excessive operating force</li> <li>- Release of jammed sash</li> <li>- Release of jammed hinge</li> <li>- Strength of restricted opening devices, location devices and maximum opening stops</li> <li>- Resistance to accidental loadings</li> <li>- Endurance of fastener/hardware</li> </ul> <p>- Jumping track test</p> <p>Operation tests</p> <ul style="list-style-type: none"> <li>- Ease of fastener operations</li> <li>- Movement of sash</li> <li>- Release of jammed sash</li> <li>- Release of jammed hinge</li> <li>- Strength of restricted opening devices, location devices and maximum opening stops</li> <li>- Resistance to accidental loading</li> </ul> <p>Operating forces</p>	<p>BS 6375: Part 1: 2009 Cl. 6          BS 6375: Part 1: 2015 + A1: 2016 Cl. 6          BS EN 1026: 2000          BS EN 1026: 2016          SS 212: 2007 Cl. 10.2.1.1, 10.2.1.4 &amp; Annex A          in conjunction with the following specification(s):          BS EN 12207: 2000          BS EN 12207: 2016</p> <p>Hong Kong Housing Authority Specification Library (2018)          (Batch 2) COM2.M005.A Cl. 2a(i)</p> <p>SS212: 2007 Cl. 10.2.2 &amp; Annex E Test 1          SS212: 2007 Cl. 10.2.2 &amp; Annex E Test 2          SS212: 2007 Cl. 10.2.2 &amp; Annex E Test 3          SS212: 2007 Cl. 10.2.2 &amp; Annex E Test 4          SS212: 2007 Cl. 10.2.2 &amp; Annex E Test 5          SS212: 2007 Cl. 10.2.2 &amp; Annex E Test 6</p> <p>SS212: 2007 Cl. 10.2.2 &amp; Annex E Test 7          SS212: 2007 Cl. 10.2.2 &amp; Annex E Test 8          SS212: 2007 Cl. 10.2.2 &amp; Annex E Test 8 with modification          (test cycle exceeding 50,000 nos. and up to 100,000 nos.)          SS212: 2007 Cl. 10.2.2 &amp; Annex E Test 9</p> <p>BS 6375: Part 2: 1987 Cl. 6.1.1, 6.1.2 and A2          BS 6375: Part 2: 1987 Cl. 6.1.3 and A3          BS 6375: Part 2: 1987 Cl. 6.2.2, A2 and A5          BS 6375: Part 2: 1987 Cl. 6.3 and A6          BS 6375: Part 2: 1987 Cl. 6.4 and A7</p> <p>BS 6375: Part 2: 1987 Cl. 6.5 and A8</p> <p>BS 6375 Part 2: 2009: Cl. 5.1 &amp; Table 1          BS EN 12046-1: 2003          in conjunction with the following specification(s):          BS EN 13115: 2001 Cl. 3</p>

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Windows (cont'd)	Resistance to racking  Resistance to static torsion  Resistance to wind test  Watertightness test  Structural performance test  Proof load test	BS 6375 Part 2: 2009 Cl. 5.2.2 BS EN 14608: 2004 in conjunction with the following specification(s): BS EN 13115: 2001 Cl. 3  BS 6375 Part 2: 2009 Cl. 5.2.1 BS EN 14609: 2004 in conjunction with the following specification(s): BS EN 13115: 2001 Cl. 3  BS 6375: Part 1: 2009 Cl. 8 BS 6375: Part 1: 2015 + A1: 2016 Cl. 8 BS EN 12211: 2000 BS EN 12211: 2016 in conjunction with the following specification(s): BS EN 12210: 2000 BS EN 12210: 2016  BS 6375: Part 1: 2009 Cl. 7 BS 6375: Part 1: 2015 + A1: 2016 Cl. 7 BS EN 1027: 2000 BS EN 1027: 2016 SS 212: 2007 Cl. 10.2.1.2, 10.2.1.5 & Annex B in conjunction with the following specification(s): BS EN 12208: 2000 BS EN 12208: 2016  SS 212: 2007 Cl. 10.2.1.3 & Annex C  SS 212: 2007 Cl. 10.2.1.6 & Annex D

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Windows (cont'd)	Deflection test	AS 4420.2: 1996 in conjunction with the following specification: AS 2047: 1999 Cl. 2.3.1.3 NZS 4211: 2008 Cl. 6
	Operating force test	AS 4420.3: 1996 in conjunction with the following specification: AS 2047: 1999 Cl. 2.3.1.4 NZS 4211: 2008 Cl. 7
	Air infiltration test	AS 4420.4: 1996 in conjunction with the following specification(s): AS 2047: 1999 Cl. 2.3.1.5 NZS 4211: 2008 Cl. 8
	Water penetration test	AS 4420.5: 1996 in conjunction with the following specification: AS 2047: 1999 Cl. 2.3.1.6 NZS 4211: 2008 Cl. 9
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