


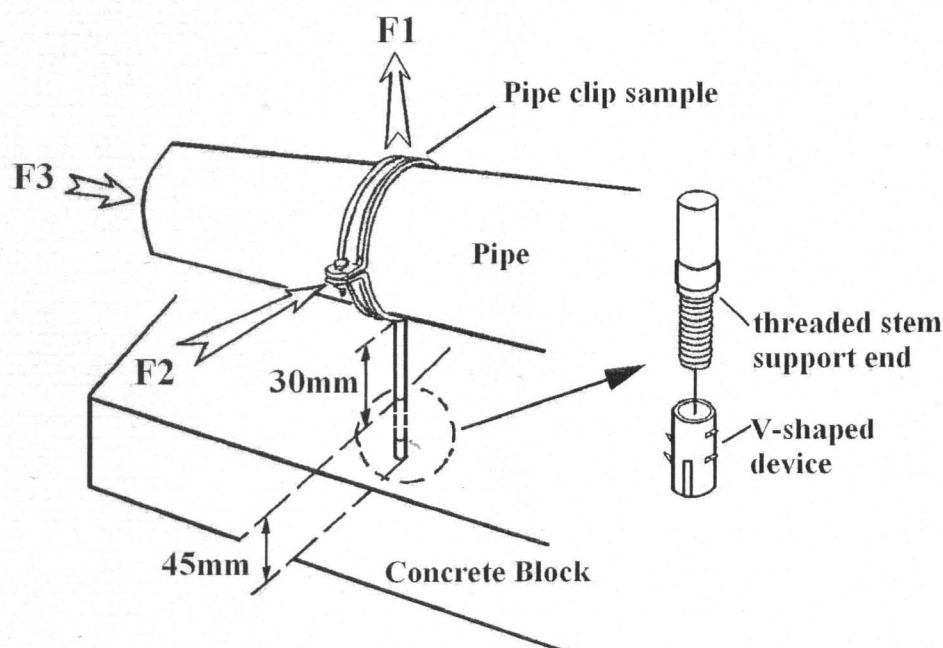


TEST REPORT

TITLE : Testing of New Patented Applied V-Shaped Tail Pipe Clip
OUR REFERENCE NO. : J13544-1
DESCRIPTION OF SAMPLE : Ø32mm (1¼") Stainless steel pipe clip supplied with plastic V-shaped tail device; for BS5255 uPVC/plastic drain pipe; dimensions: 15mm width x 2.5mm thick ring; with Ø9mm support stem electrically welded onto the ring; with 3/16" x 5/8" screws and nuts. (Factory confirmed that M5x15mm screws and nuts are also available). Patent No.: ZL2007 2 0183080.4
SAMPLE SUBMITTED BY : Cheung's Engineering Co.
G/F., 90 Tak Cheong Street,
Kowloon, Hong Kong.
(web-site : <http://www.pipe-clips.com>)
MANUFACTURER : Cheung's Engineering Co.
BRAND / LOGO : 
COUNTRY OF ORIGIN : China
TEST REQUIRED : Loading test
PERIOD OF TESTS : 14th April to 14th May 2009

RESULTS: - LOADING TEST

1. A concrete block made of concrete mix grade 30D10 (cement to BS12: 1978 and Aggregate to BS882: 1973) was prepared and used for the loading test.
2. The plastic V-shaped tail device was connected to the end of a new pipe clip's support stem.





NUTEK SYSTEMS, LTD.


Unit B, 13/F., Universal Ind. Ctr.,
23-25 Shan Mei Street,
Fo Tan, Shatin, N.T., Hong Kong.
Tel: (852) 2605 5736 Fax: (852) 2692 0798
E-mail: nutek@nuteksystems.com

TEST REPORT

OUR REFERENCE NO. J13544-1 (P.2)

3. The concrete block was secured to the loading test frame. A hole was drilled on the concrete block; the pipe clip's support stem was hammered into the hole. The pipe clip was further screwed into the hole until it was hand-tight; the length of the concealed part of the support stem was now about 40mm to 50mm. A 32mm uPVC drain pipe of BS5255 was then clamped by the pipe clip.
4. The vertical pulling force **F1** applied to detach the pipe clip from the concrete block was measured.
5. Steps 1 to 3 were repeated. A horizontal force **F2** applied to the pipe clip (perpendicular to the pipe axis) to result in a 20mm horizontal deflection was measured.
6. Steps 1 to 3 were repeated. A horizontal force **F3** acting on the pipe along its longitudinal axis to slip the pipe from the pipe clip by 20mm was measured.
7. Result :

Vertical force F1 to detach the pipe clip from the concrete block (kgf)	Horizontal force F2 to result in a 20mm horizontal deflection (kgf)	Horizontal force F3 to slip the pipe by 20mm (kgf)
280	182	235

Date : 4th June 2009 Authorized signature : 

Nutek Systems is a testing agency,
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testing water supply fittings.

Samson W.K. Yiu

(Director)



TEST REPORT


TITLE : Testing of New Patented Applied V-Shaped Tail Pipe Clip

OUR REFERENCE NO. : J13544-2

DESCRIPTION OF SAMPLE : Ø40mm (1½") Stainless steel pipe clip supplied with plastic V-shaped tail device; for BS5255 uPVC/plastic drain pipe; dimensions: 15mm width x 2.5mm thick ring; with Ø9mm support stem electrically welded onto the ring; with 3/16" x 5/8" screws and nuts. (Factory confirmed that M5x15mm screws and nuts are also available). Patent No.: ZL2007 2 0183080.4

SAMPLE SUBMITTED BY : Cheung's Engineering Co.
G/F., 90 Tak Cheong Street,
Kowloon, Hong Kong.
(web-site : <http://www.pipe-clips.com>)

MANUFACTURER : Cheung's Engineering Co.

BRAND / LOGO : 

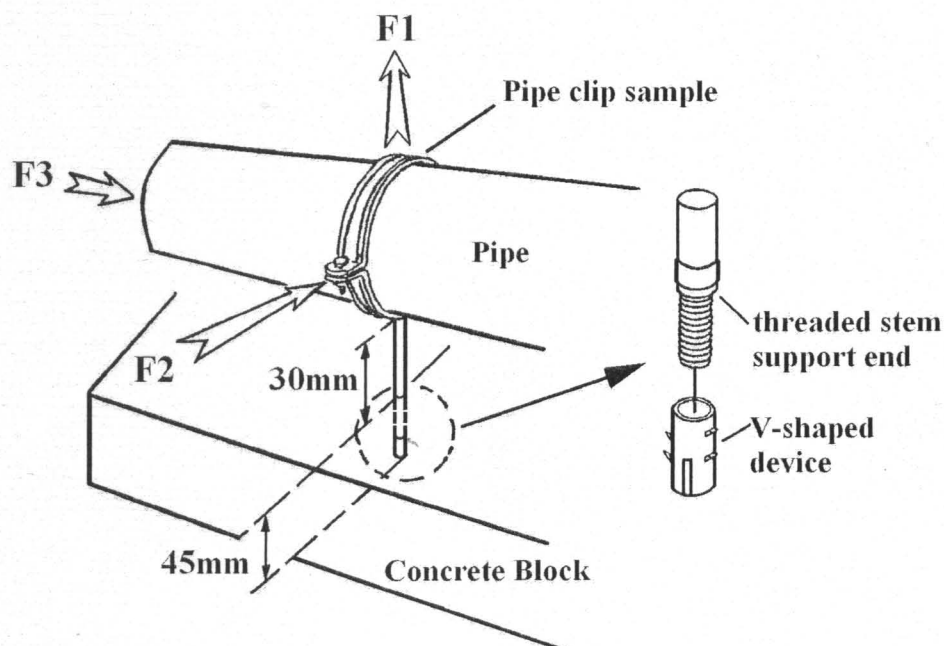
COUNTRY OF ORIGIN : China

TEST REQUIRED : Loading test

PERIOD OF TESTS : 14th April to 14th May 2009

RESULTS: - LOADING TEST

1. A concrete block made of concrete mix grade 30D10 (cement to BS12: 1978 and Aggregate to BS882: 1973) was prepared and used for the loading test.
2. The plastic V-shaped tail device was connected to the end of a new pipe clip's support stem.





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Unit B, 13/F., Universal Ind. Ctr.,
23-25 Shan Mei Street,
Fo Tan, Shatin, N.T., Hong Kong.
Tel: (852) 2605 5736 Fax: (852) 2692 0798
E-mail: nutek@nuteksystems.com

TEST REPORT


OUR REFERENCE NO.: J13544-2 (P.2)

3. The concrete block was secured to the loading test frame. A hole was drilled on the concrete block; the pipe clip's support stem was hammered into the hole. The pipe clip was further screwed into the hole until it was hand-tight; the length of the concealed part of the support stem was now about 40mm to 50mm. A 40mm uPVC drain pipe of BS5255 was then clamped by the pipe clip.
4. The vertical pulling force **F1** applied to detach the pipe clip from the concrete block was measured.
5. Steps 1 to 3 were repeated. A horizontal force **F2** applied to the pipe clip (perpendicular to the pipe axis) to result in a 20mm horizontal deflection was measured.
6. Steps 1 to 3 were repeated. A horizontal force **F3** acting on the pipe along its longitudinal axis to slip the pipe from the pipe clip by 20mm was measured.
7. Result :

Vertical force F1 to detach the pipe clip from the concrete block (kgf)	Horizontal force F2 to result in a 20mm horizontal deflection (kgf)	Horizontal force F3 to slip the pipe by 20mm (kgf)
280	180	230

Date : 4th June 2009 Authorized signature : _____

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Samson W.K. Yiu
(Director)



TEST REPORT


TITLE : Testing of New Patented Applied V-Shaped Tail Pipe Clip

OUR REFERENCE NO. : J13544-3

DESCRIPTION OF SAMPLE : Ø50mm (2") Stainless steel pipe clip supplied with plastic V-shaped tail device; for BS5255 uPVC/plastic drain pipe; dimensions: 18mm width x 2.5mm thick ring; with Ø9mm support stem electrically welded onto the ring; with ¼" x ¾" screws and nuts. (Factory confirmed that M6x20mm screws and nuts are also available). Patent No.: ZL2007 2 0183080.4

SAMPLE SUBMITTED BY : Cheung's Engineering Co.
G/F., 90 Tak Cheong Street,
Kowloon, Hong Kong.
(web-site : <http://www.pipe-clips.com>)

MANUFACTURER : Cheung's Engineering Co.

BRAND / LOGO : 

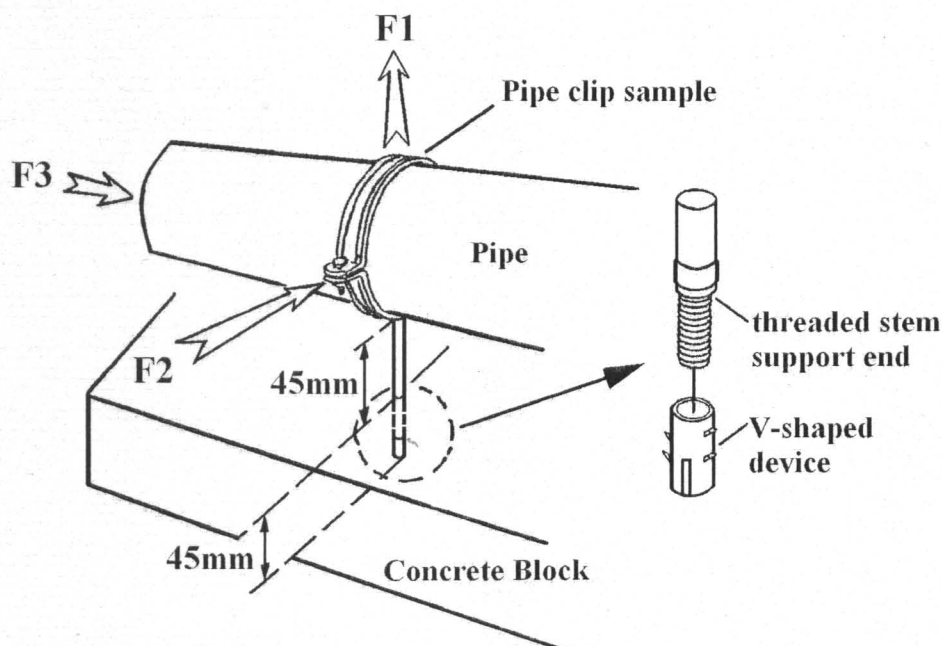
COUNTRY OF ORIGIN : China

TEST REQUIRED : Loading test

PERIOD OF TESTS : 14th April to 14th May 2009

RESULTS: - LOADING TEST

1. A concrete block made of concrete mix grade 30D10 (cement to BS12: 1978 and Aggregate to BS882: 1973) was prepared and used for the loading test.
2. The plastic V-shaped tail device was connected to the end of a new pipe clip's support stem.





TEST REPORT


OUR REFERENCE NO. J13544-3 (P.2)

3. The concrete block was secured to the loading test frame. A hole was drilled on the concrete block; the pipe clip's support stem was hammered into the hole. The pipe clip was further screwed into the hole until it was hand-tight; the length of the concealed part of the support stem was now about 40mm to 50mm. A 150mm uPVC drain pipe of BS5255 was then clamped by the pipe clip.
4. The vertical pulling force **F1** applied to detach the pipe clip from the concrete block was measured.
5. Steps 1 to 3 were repeated. A horizontal force **F2** applied to the pipe clip (perpendicular to the pipe axis) to result in a 20mm horizontal deflection was measured.
6. Steps 1 to 3 were repeated. A horizontal force **F3** acting on the pipe along its longitudinal axis to slip the pipe from the pipe clip by 20mm was measured.
7. Result :

Vertical force F1 to detach the pipe clip from the concrete block (kgf)	Horizontal force F2 to result in a 20mm horizontal deflection (kgf)	Horizontal force F3 to slip the pipe by 20mm (kgf)
280	113	255

Date : 4th June 2009 Authorized signature : _____

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Samson W.K. Yiu
(Director)



TEST REPORT


TITLE : Testing of New Patented Applied V-Shaped Tail Pipe Clip

OUR REFERENCE NO. : J13544-4

DESCRIPTION OF SAMPLE : Ø65mm (2½") Stainless steel pipe clip supplied with plastic V-shaped tail device; for BS5255/BS4514 uPVC/plastic drain pipe; dimensions: 18mm width x 2.5mm thick ring; with Ø9mm support stem electrically welded onto the ring; with ¼" x ¾" screws and nuts. (Factory confirmed that M6x20mm screws and nuts are also available). Patent No.: ZL2007 2 0183080.4

SAMPLE SUBMITTED BY : Cheung's Engineering Co.
G/F., 90 Tak Cheong Street,
Kowloon, Hong Kong.
(web-site : <http://www.pipe-clips.com>)

MANUFACTURER : Cheung's Engineering Co.

BRAND / LOGO : 

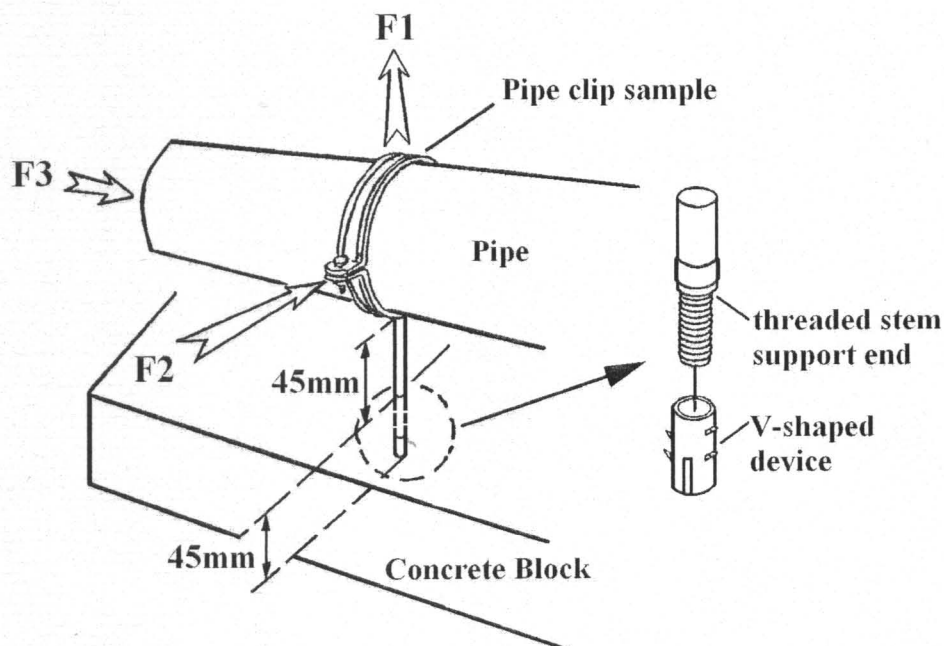
COUNTRY OF ORIGIN : China

TEST REQUIRED : Loading test

PERIOD OF TESTS : 14th April to 14th May 2009

RESULTS: - LOADING TEST

1. A concrete block made of concrete mix grade 30D10 (cement to BS12: 1978 and Aggregate to BS882: 1973) was prepared and used for the loading test.
2. The plastic V-shaped tail device was connected to the end of a new pipe clip's support stem.






TEST REPORT

OUR REFERENCE NO. J13544-4 (P.2)

3. The concrete block was secured to the loading test frame. A hole was drilled on the concrete block; the pipe clip's support stem was hammered into the hole. The pipe clip was further screwed into the hole until it was hand-tight; the length of the concealed part of the support stem was now about 40mm to 50mm. A 65mm uPVC drain pipe of BS5255/BS4514 was then clamped by the pipe clip.
4. The vertical pulling force **F1** applied to detach the pipe clip from the concrete block was measured.
5. Steps 1 to 3 were repeated. A horizontal force **F2** applied to the pipe clip (perpendicular to the pipe axis) to result in a 20mm horizontal deflection was measured.
6. Steps 1 to 3 were repeated. A horizontal force **F3** acting on the pipe along its longitudinal axis to slip the pipe from the pipe clip by 20mm was measured.
7. Result :

Vertical force F1 to detach the pipe clip from the concrete block (kgf)	Horizontal force F2 to result in a 20mm horizontal deflection (kgf)	Horizontal force F3 to slip the pipe by 20mm (kgf)
280	119	250

Date : 4th June 2009 Authorized signature : 

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Samson W.K. Yiu
(Director)



TEST REPORT


TITLE : Testing of New Patented Applied V-Shaped Tail Pipe Clip

OUR REFERENCE NO. : J13544-5

DESCRIPTION OF SAMPLE : Ø80mm (3") Stainless steel pipe clip supplied with plastic V-shaped tail device; for BS4514 uPVC/plastic drain pipe; dimensions: 18mm width x 2.5mm thick ring; with Ø9mm support stem electrically welded onto the ring; with ¼" x ¾" screws and nuts. (Factory confirmed that M6x20mm screws and nuts are also available). Patent No.: ZL2007 2 0183080.4

SAMPLE SUBMITTED BY : Cheung's Engineering Co.
G/F., 90 Tak Cheong Street,
Kowloon, Hong Kong.
(web-site : <http://www.pipe-clips.com>)

MANUFACTURER : Cheung's Engineering Co.

BRAND / LOGO : 

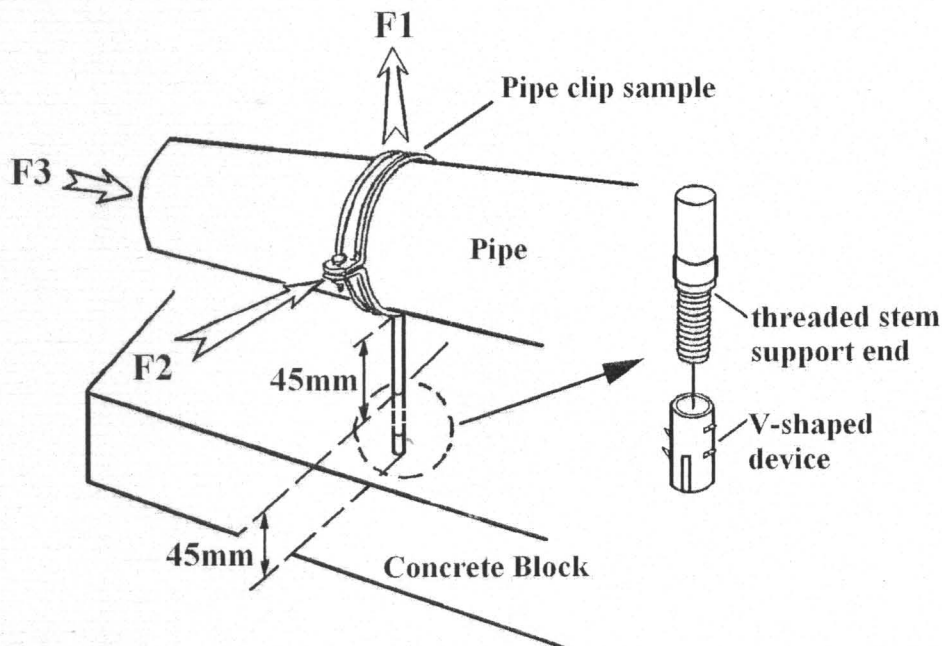
COUNTRY OF ORIGIN : China

TEST REQUIRED : Loading test

PERIOD OF TESTS : 14th April to 14th May 2009

RESULTS: - LOADING TEST

1. A concrete block made of concrete mix grade 30D10 (cement to BS12: 1978 and Aggregate to BS882: 1973) was prepared and used for the loading test.
2. The plastic V-shaped tail device was connected to the end of a new pipe clip's support stem.





NUTEK SYSTEMS, LTD.

Unit B, 13/F., Universal Ind. Ctr.,
23-25 Shan Mei Street,
Fo Tan, Shatin, N.T., Hong Kong.
Tel: (852) 2605 5736 Fax: (852) 2692 0798
E-mail: nutek@nuteksystems.com

TEST REPORT


OUR REFERENCE NO. J13544-5 (P.2)

3. The concrete block was secured to the loading test frame. A hole was drilled on the concrete block; the pipe clip's support stem was hammered into the hole. The pipe clip was further screwed into the hole until it was hand-tight; the length of the concealed part of the support stem was now about 40mm to 50mm. A 80mm uPVC drain pipe of BS4514 was then clamped by the pipe clip.
4. The vertical pulling force **F1** applied to detach the pipe clip from the concrete block was measured.
5. Steps 1 to 3 were repeated. A horizontal force **F2** applied to the pipe clip (perpendicular to the pipe axis) to result in a 20mm horizontal deflection was measured.
6. Steps 1 to 3 were repeated. A horizontal force **F3** acting on the pipe along its longitudinal axis to slip the pipe from the pipe clip by 20mm was measured.
7. Result :

Vertical force F1 to detach the pipe clip from the concrete block (kgf)	Horizontal force F2 to result in a 20mm horizontal deflection (kgf)	Horizontal force F3 to slip the pipe by 20mm (kgf)
280	118	245


Date : 4th June 2009 Authorized signature : _____

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Samson W.K. Yiu
(Director)

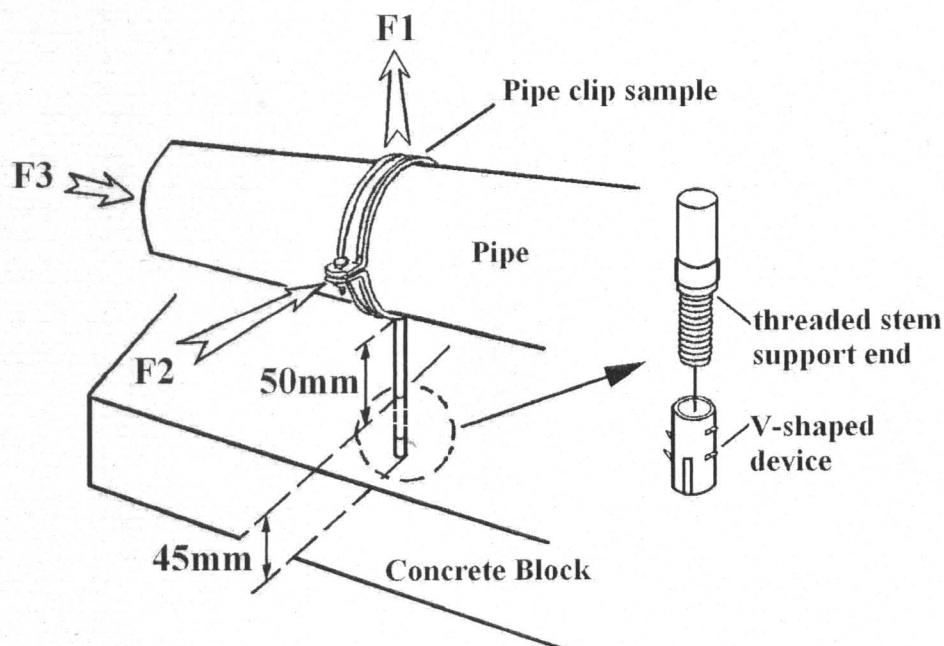


TEST REPORT

TITLE : Testing of New Patented Applied V-Shaped Tail Pipe Clip
OUR REFERENCE NO. : J13544-6
DESCRIPTION OF SAMPLE : Ø100mm (4") Stainless steel pipe clip supplied with plastic V-shaped tail device; for BS4514 uPVC/plastic drain pipe; dimensions: 19mm width x 2.5mm thick ring; with Ø3/8" support stem electrically welded onto the ring; with ¼" x ¾" screws and nuts. (Factory confirmed that M6x20mm screws and nuts are also available). Patent No.: ZL2007 2 0183080.4
SAMPLE SUBMITTED BY : Cheung's Engineering Co.
G/F., 90 Tak Cheong Street,
Kowloon, Hong Kong.
(web-site : <http://www.pipe-clips.com>)
MANUFACTURER : Cheung's Engineering Co.
BRAND / LOGO : 
COUNTRY OF ORIGIN : China
TEST REQUIRED : Loading test
PERIOD OF TESTS : 14th April to 14th May 2009

RESULTS: - LOADING TEST

1. A concrete block made of concrete mix grade 30D10 (cement to BS12: 1978 and Aggregate to BS882: 1973) was prepared and used for the loading test.
2. The plastic V-shaped tail device was connected to the end of a new pipe clip's support stem.





NUTEK SYSTEMS, LTD.

Unit B, 13/F., Universal Ind. Ctr.,
23-25 Shan Mei Street,
Fo Tan, Shatin, N.T., Hong Kong.
Tel: (852) 2605 5736 Fax: (852) 2692 0798
E-mail: nutek@nuteksystems.com

TEST REPORT

OUR REFERENCE NO. J13544-6 (P.2)

3. The concrete block was secured to the loading test frame. A hole was drilled on the concrete block; the pipe clip's support stem was hammered into the hole. The pipe clip was further screwed into the hole until it was hand-tight; the length of the concealed part of the support stem was now about 40mm to 50mm. A 100mm uPVC drain pipe of BS4514 was then clamped by the pipe clip.
4. The vertical pulling force **F1** applied to detach the pipe clip from the concrete block was measured.
5. Steps 1 to 3 were repeated. A horizontal force **F2** applied to the pipe clip (perpendicular to the pipe axis) to result in a 20mm horizontal deflection was measured.
6. Steps 1 to 3 were repeated. A horizontal force **F3** acting on the pipe along its longitudinal axis to slip the pipe from the pipe clip by 20mm was measured.
7. Result :

Vertical force F1 to detach the pipe clip from the concrete block (kgf)	Horizontal force F2 to result in a 20mm horizontal deflection (kgf)	Horizontal force F3 to slip the pipe by 20mm (kgf)
280	98	240

Date : 4th June 2009 Authorized signature : _____

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Samson W.K. Yiu

(Director)



TEST REPORT


TITLE : Testing of New Patented Applied V-Shaped Tail Pipe Clip

OUR REFERENCE NO. : J13544-7

DESCRIPTION OF SAMPLE : Ø100mm (4") Stainless steel pipe clip supplied with plastic V-shaped tail device; for BS4514 uPVC/plastic drain pipe; dimensions: 19mm width x 2.5mm thick ring; with Ø12mm support stem electrically welded onto the ring; with ¼" x ¾" screws and nuts. (Factory confirmed that M6x20mm screws and nuts are also available). Patent No.: ZL2007 2 0183080.4

SAMPLE SUBMITTED BY : Cheung's Engineering Co.
G/F., 90 Tak Cheong Street,
Kowloon, Hong Kong.
(web-site : <http://www.pipe-clips.com>)

MANUFACTURER : Cheung's Engineering Co.

BRAND / LOGO : 

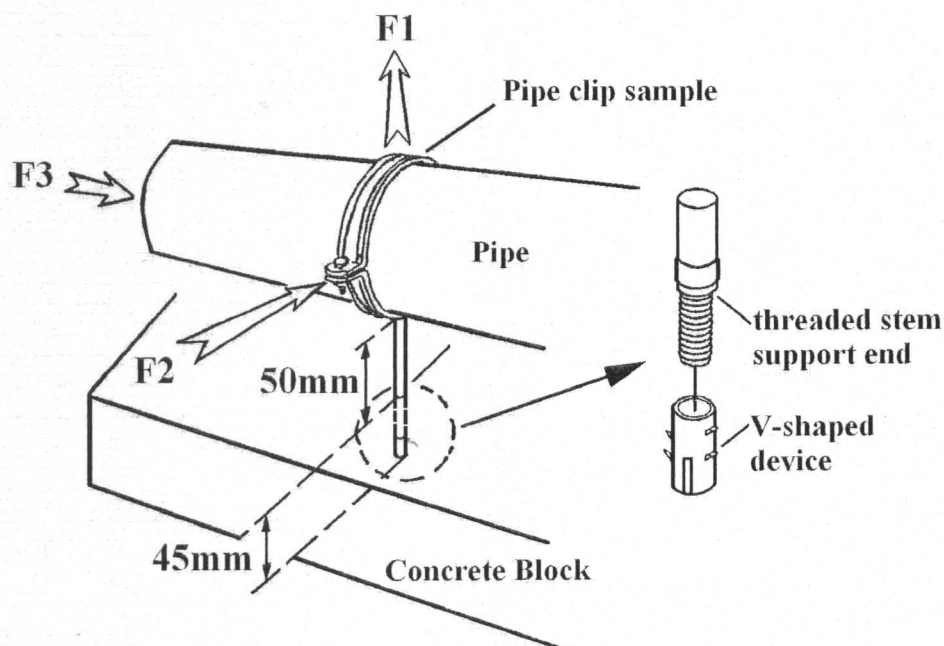
COUNTRY OF ORIGIN : China

TEST REQUIRED : Loading test

PERIOD OF TESTS : 14th April to 14th May 2009

RESULTS: - LOADING TEST

1. A concrete block made of concrete mix grade 30D10 (cement to BS12: 1978 and Aggregate to BS882: 1973) was prepared and used for the loading test.
2. The plastic V-shaped tail device was connected to the end of a new pipe clip's support stem.





TEST REPORT


OUR REFERENCE NO. J13544-7 (P.2)

3. The concrete block was secured to the loading test frame. A hole was drilled on the concrete block; the pipe clip's support stem was hammered into the hole. The pipe clip was further screwed into the hole until it was hand-tight; the length of the concealed part of the support stem was now about 40mm to 50mm. A 100mm uPVC drain pipe of BS4514 was then clamped by the pipe clip.
4. The vertical pulling force **F1** applied to detach the pipe clip from the concrete block was measured.
5. Steps 1 to 3 were repeated. A horizontal force **F2** applied to the pipe clip (perpendicular to the pipe axis) to result in a 20mm horizontal deflection was measured.
6. Steps 1 to 3 were repeated. A horizontal force **F3** acting on the pipe along its longitudinal axis to slip the pipe from the pipe clip by 20mm was measured.
7. Result :

Vertical force F1 to detach the pipe clip from the concrete block (kgf)	Horizontal force F2 to result in a 20mm horizontal deflection (kgf)	Horizontal force F3 to slip the pipe by 20mm (kgf)
380	98	240

Date : 4th June 2009 Authorized signature : _____

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Samson W.K. Yiu
(Director)



TEST REPORT


TITLE : Testing of New Patented Applied V-Shaped Tail Pipe Clip

OUR REFERENCE NO. : J13544-8

DESCRIPTION OF SAMPLE : Ø150mm (6") Stainless steel pipe clip supplied with plastic V-shaped tail device; for BS4514 uPVC/plastic drain pipe; dimensions: 19mm width x 3mm thick ring; with Ø12mm support stem electrically welded onto the ring; with ¼" x ¾" screws and nuts. (Factory confirmed that M6x20mm screws and nuts are also available). Patent No.: ZL2007 2 0183080.4

SAMPLE SUBMITTED BY : Cheung's Engineering Co.
G/F., 90 Tak Cheong Street,
Kowloon, Hong Kong.
(web-site : <http://www.pipe-clips.com>)

MANUFACTURER : Cheung's Engineering Co.

BRAND / LOGO : 

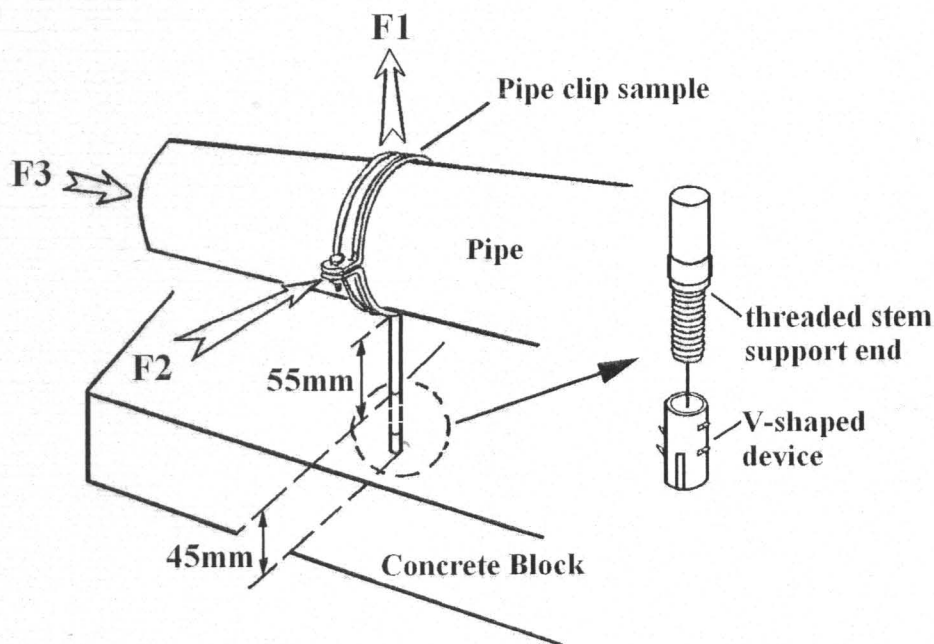
COUNTRY OF ORIGIN : China

TEST REQUIRED : Loading test

PERIOD OF TESTS : 14th April to 14th May 2009

RESULTS: - LOADING TEST

1. A concrete block made of concrete mix grade 30D10 (cement to BS12: 1978 and Aggregate to BS882: 1973) was prepared and used for the loading test.
2. The plastic V-shaped tail device was connected to the end of a new pipe clip's support stem.





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Unit B, 13/F., Universal Ind. Ctr.,
23-25 Shan Mei Street,
Fo Tan, Shatin, N.T., Hong Kong.
Tel: (852) 2605 5736 Fax: (852) 2692 0798
E-mail: nutek@nuteksystems.com

TEST REPORT

OUR REFERENCE NO. J13544-8 (P.2)

3. The concrete block was secured to the loading test frame. A hole was drilled on the concrete block; the pipe clip's support stem was hammered into the hole. The pipe clip was further screwed into the hole until it was hand-tight; the length of the concealed part of the support stem was now about 40mm to 50mm. A 150mm uPVC drain pipe of BS4514 was then clamped by the pipe clip.
4. The vertical pulling force **F1** applied to detach the pipe clip from the concrete block was measured.
5. Steps 1 to 3 were repeated. A horizontal force **F2** applied to the pipe clip (perpendicular to the pipe axis) to result in a 20mm horizontal deflection was measured.
6. Steps 1 to 3 were repeated. A horizontal force **F3** acting on the pipe along its longitudinal axis to slip the pipe from the pipe clip by 20mm was measured.
7. Result :

Vertical force F1 to detach the pipe clip from the concrete block (kgf)	Horizontal force F2 to result in a 20mm horizontal deflection (kgf)	Horizontal force F3 to slip the pipe by 20mm (kgf)
380	86	220

Date : 4th June 2009 Authorized signature : _____

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Samson W.K. Yiu

(Director)