Rooftop Safety System, Crawling board / Duck ladder

Safety of workers on roof of A.C. Sheets has assumed high priority due to serious risks involved; often resulting in fatal accidents. After occurrence of any roof top accidents, the unfortunate worker, who inadvertently steps on a weakened sheet due to its deceptive look, may get compensation from the contractor who employs him or through his E.S.I. cover. But, a "Prime Employer", cannot avoid proceedings for lack of Safety as per Factories act.

Factory Directorates have made stringent rules to provide "SOME" safety system. Ours is the "ONLY" easy to use, easy to carry system of its kind available in the country today. We have supplied over 3850 Sets of this system all over India. Recently we have developed & perfected this system with a unique feature - the full ladder of 3 m. length can now be folded at the center, to increase its manoeuvrability at roof height against wind pressure. He will be able to work with great ease now, overcoming his general resistance to use the system. This PATENTED roof top safety system is manufactured under Patent No. 185664 Dtd. 03/10/1996 It conforms to IS specifications. Our system has been awarded many "Merit Awards" for its innovativeness & simplicity in its usage. Yet, our biggest reward is the satisfaction of protecting precious human lives.

We have also introduced our Fabricare KatNet system, a lightweight net to be fixed on top of roof & not below and to be used in combination with this system. You will get the information in our section - RoofNet on this site.

**FABRICARE Rooftop Catwalk System**

| Part Name CRFL / TDFL | Ladder 3 Mtr. long | 3 Nos. Folding or Non-folding type |
| Part Name CRHL / TDHL | Half Ladder 1.8 Mtr. long | 2 Nos |
| Part Name CRWP / TDWP | Working Platform 0.6 Mtrs. long | 3 Nos |
| Part Name CL | Quick Action Eccentric Clamps | 30 Nos. |
| Part Name EP | Elevating Pads | 18 Nos |
| Part Name HS | Harness 3 Mtrs. long | 3 Nos |
| Part Name SL | Bolt Changing Sleeves | 5 Nos. |
| Part Name BEXA | Bolt Extension accessories | 10 Nos |

The Fabricare Rooftop Catwalk System is bearing Patent No. 185664 Dtd. 03/10/96. One set for Corrugated CRST or Trafford TDST type of sheets, consists of the following. This has been appreciated by the Factory Inspectorates / Directorates in various States under Respective Factories Rules, consists of the following:
**Specification:-**

- The Side members should be made from HE-9 grade tempered Aluminium Alloy No.6063.
- Steps are made from High Impact grade Virgin Acrylo Butadine Styrenes (A.B.S.).
- Steps are to be reinforced by Aluminium strips made from HE-20 grade alloy No.6351.
- Steps should have inserts of Aluminium, giving clearance of 0.1 mm over the Dia of Rivets.
- Brackets are made from Glass filled Nylon - Grade Virgin Nylon-66.
- Rivets are hallow rivets, having good shear strength.
- Saddles are made from Virgin `Low Density Polypropylene.
- Anti-skid padding should be made from Natural Rubber.
- Elevating Pads are made from Virgin Polypropylene.
- Eccentric Clamps should be made from good quality LM6 grade Aluminium / Virgin Nylon-66.
- A segment of 3 Mtrs. should take Load of 500 Kgs. in operating conditions.
- Full Ladder should NOT have steps less than 13 numbers, while Half Ladder 1.8 long should not have steps less than 8 numbers not have steps less than 8 numbers.
Pin Locking of Folding Ladder

From horrendous accident . . .

An engineer was working in a multinational factory with modern amenities, having progressive management and a respectable accident free record. A sharp crack a terrified, piteous scream ... a sickening thud and a roof worker fell to death, impaled on a projecting machine part. This accident, witnessed by this young engineer on the shop floor, changed his life ... and the concept of Rooftop Safety itself was born. Giving up his job, dedicating all his efforts to the cause of SAFETY, he invented a foolproof safety system for rooftop workers and FABRICARE was born. For the benefit of our customers, marketing & sales is assigned to KATALIST Safety System.

Our R & D division is at work, not only to improve the Rooftop Catwalk System, but also to identify both obvious and hidden dangers, health hazards and safety risks while working and to device systems to safeguard the unprotected workers.

Fabricare Rooftop Catwalk System, a system to work safely on Fragile A.C. Rooftops

Safety of workers on A.C. Sheets has assumed high priority due to serious risks; often resulting in fatal accidents. After occurrence of any roof top accidents, an occupier faces a chain of unwarranted events, like downtime, production losses, compensations, legal costs & litigation. The unfortunate worker, who inadvertently steps, due to its deceptive look, on a weakened sheet, may get his compensation from the contractor who employs him or through his insurance cover. But, a Prime Employer, can not avoid rigorous penalties & proceedings for lack of safety as per demands of Factories Rules / act. Factory Directorates all over India have made stringent rules to provide SOME safety system compulsory. Ours is the ONLY easy to use, light to carry system of its kind available in the country today exclusively for roof top work.

Recently, we have developed & perfected this system in FOLDING TYPE. This PATENTED roof top safety system is manufactured against Patent No.185664 Dtd. 03/10/1996 and has been acclaimed by Factory Directorates under the respective Factories Rules. Our system has been awarded many Merit Awards like N.R.D.C. & of various Chambers of Commerce for its innovativeness & simplicity in its usage. Yet, our biggest reward is the satisfaction of protecting precious human lives. So far, since 1980 we have supplied over 4150 Sets of this system to various establishments all over India.

It offers immunity from post accident worries & botheration.

There are many who are DEALERS in safety products. How many of these have INVENTED any product on their own. KATALIST with its R & D has invented all its products and having patented them and backed by our experience in the field since 1980 has put us in a position of a pacesetter.
Awards for excellence

- This work was appreciated and acknowledged by different bodies several prestigious awards:
  - National Research & Development Corporation, New Delhi,(Govt. of India Undertaking, 1982)
  - Dahanukar Entrepreneur Award(Maharashtra Chamber of Commerce, Bombay 1981),
  - G.S.Parkhe Industrial Award (Mahratta Chamber of Commerce and Industries, Pune 1981),
  - Y.G.Mehandale Health & Safety Award(Institution of Engineers, Pune - 1982)

Yet, our biggest reward is the satisfaction of having designed systems to defeat both, obvious and hidden dangers, health hazards and safety risks while working which are ever present brooding, looking with malevolent eyes for likely victims. Satisfaction of protecting precious human lives has no substitute.

Clamping of Ladder

Clamping Of Ladder
Elevating Pads

An engineer was working in a multinational factory with modern amenities, having progressive management and a respectable accident free record. A sharp crack a terrified, piteous scream ... a sickening thud and a roof worker fell to death, impaled on a projecting machine part. This accident, witnessed by this young engineer on the shop floor, changed his life ... and the concept of Rooftop Safety itself was born. Giving up his job, dedicating all his efforts to the cause of SAFETY, he invented a foolproof safety system for rooftop workers and FABRICARE was born. For the benefit of our customers, marketing & sales is assigned to KATALIST Safety System.

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It offers immunity from post accident worries & botheration. We have a 20 minutes VCD which spells the utility & necessity of this system. We manufacture Sets suitable for A.C. sheets, suitable for Corrugated & Semi-Corrugated, i.e. Trafford type. The cost of both the types is same. We also manufacture Sets suitable for Metal trough sheets. We offer a live demonstration for the effective & correct use of our system. Our team of Demonstrators will train the concerned, at a nominal charge.

A pace-setter . . .

There are many who are DEALERS in safety products. How many of these have INVENTED any product on their own. KATALIST with its R & D has invented all its products and having patented them and backed by our experience in the field since 1980 has put us in a position of a pacesetter.

After lapse of our earlier patent, many copied our earlier design of Rooftop Catwalk System without knowledge of its operation and the rooftop problems. They have manufactured our old design. But, do they have answers to the problems roof workers face on rooftop?

Such purchase results in ineffective investment as the system would be observed, laid in a corner, unused, provided by the “prime employer”
Awards for excellence . . .

This work was appreciated and acknowledged by different bodies several prestigious awards:

- National Research & Development Corporation, New Delhi, (Govt. of India Undertaking, 1982)
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Changing of the broken sheet after an accident

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Bureau Of Indian Standards is in the process of finalising a Standard titled Code of practice for laying, inspection and maintenance of Fragile Roofs through Docket No. DOC CED45 (3762). This Standard endorses above Configuration of components in a full Set of roof Ladder, which is termed as Minimum Adequate Quantity to carry out various jobs on the fragile Roofs with minimum shifting.

**Specifications:**

The Side members should be made from HE-9 grade tempered Aluminium Alloy No.6063. Steps are made from High Impact grade Virgin Acrylo Butadine Styrenes (A.B.S.). Steps are to be reinforced by Aluminium strips made from HE-20 grade alloy No.6351. Steps should have inserts of Aluminium, giving clearance of 0.1 mm over the Dia of Rivets. Brackets are made from Glass filled Nylon - Grade Virgin Nylon-66. Rivets are hallow rivets, having good shear strength. Elevating Pads are made from Virgin Polypropylene. Eccentric Clamps should be made from good quality LM6 grade Aluminium / Virgin Nylon- 66. A segment of 3 Mtrs. should take Load of 500 Kgs. in operating conditions. Full Ladder should NOT have steps less than 13 numbers, while Half Ladder 1.8 long should not have steps less than 8 numbers not have steps less than 8 numbers.
Nets laid on roof (Flat Angle)

Application for Combination of Rooftop Catwalk and Rooftop Net system

**Laying of sheets :**
For initial laying, the combination of Rooftop Catwalk and Rooftop Net system shall prove to be ideal, once first few sheets are laid conventionally.

**Roof, roof gutters & north light glass cleaning :**
While cleaning of gutters, across the corrugation & along the gutter line, combination of Rooftop Catwalk and Rooftop Net system shall give maximum coverage. The nets are to be laid one in front of the other along the 15 Ft. length of the nets.

**Waterproofing :**
Combination of Rooftop Catwalk and Rooftop Net system over the roof will give maximum coverage. The KatNets shall give direct access to the roofing bolts for water proofing as the opening is 70 mm. X 70 mm.

**Changing particular sheets :**
Combination of Rooftop Catwalk and Rooftop Net system over the roof in the desired area of operation with required portion of the nets unclamped & folded shall do the job SAFE and FAST.

**Painting of sheets :**
Combination of Rooftop Catwalk and Rooftop Net system over the roof in the desired area of operation with required portion of the nets unclamped shall do the job SAFE and FAST.

**Attending projecting Apparatus :**
Combination of Rooftop Catwalk and Rooftop Net system on a predetermined work area facilitates frequent attendance EASY & SAFE.

Use during rainy season  Combination of Rooftop Catwalk and Rooftop Net system for all above operation is possible.
Type of Industries:

Engineering

Chemical

Foundry

Press Shops

On shore Industries

Chemical Warehouses

**Heavy use of corrosive chemicals:**
like High Explosive Factories, Heat Treatment Shop, Fertilisers

**Petroleum & Petrochemicals:**

Ports & Ware housing  Food storage & Sugar Ware houses

Breweries & Sugar Industries

Atomic Plants
Rooftop Safety Nets

In Indian Industry, on top of their Asbestos Cement (A.C.) sheet roofs, the roof workers are left to the mercy of God if they work without any system or else they use rooftop safety systems. These sheets are fragile and visually the weak sheets cannot be differentiated from the good ones. Stepping directly on these sheets might always be a call of a fatal accident. The height from which the worker falls, the object on which he falls prior to hitting the ground are some of the various factors which make these accidents more dangerous and highly fatal. This accounts for thousands of rooftop accidents every year; most of these are fatal ones.

Use of rooftop safety system limits the speed of work and this was one of the main causes of neglecting the system while actually working on rooftop. The system would be observed, laid in a corner, unused, provided by the employer - the industry awarding the contract of rooftop jobs.

With a definite increased element of safety awareness in Indian Industry on introduction of ratings like ISO etc., the industry would insist on tying of a net at the truss level under the roof when the working on floor below is in progress. These nets are BULKY and quite CUMBERSOME. Tying them at the truss level is a time consuming, laborious & nightmarish job. The net has to be strong enough because of the momentum, to hold the falling workers from a height. THE FACTOR OF GRAVITY COMES INTO PLAY. Thus, this safer working procedure further limits the speed of the work on rooftop and thus the productivity or the output of work reduces to 30 - 35%. This creates reluctance and then deliberate negligence sets in both, on the part of the contractor and on the part of the employer who employs him as well.

This gave rise to invent some system, which will SPEED UP THE WORK WITHOUT COMPROMISING ON SAFETY while working on rooftops.

The system "Fabricare KatNet System" consists of two essential parts:

i) "Fabricare KatNet" - A light weight net with its fixing attachments and accessories &;

ii) Rooftop Safety System

Fabricare KatNet" nets are made from polymer rope of 2 mm. dia. having 70 mm X 70 mm. opening mesh. It is overlocked to border rope in a knotted construction. The nets are made in suitable STANDARD PANEL SIZES.

They are extremely light in weight. With this reduced weight carrying the nets to rooftop & spreading and fixing them is much EASIER TASK, than tying the net at truss level even when the working on floor below is in progress. THIS IS ENTIRELY A NEW CONCEPT. This is Pending Patent No. 1388 / MUM / 04 Dtd. 22/12/2004.

These nets are available in standard panel sizes.

The accessories, "NYLOFIXERS" are specially developed & made from flat nylon straps, eyelets, fixing bolt and fixing sleeve. One is "ENDFIXERS" which is a strap to fix the net to roof bolts. The other is "MIDFIXERS" which is also a strap for fixing one net with adjoining net. Rooftop safety system, in combination, is EASILY used over these nets without any obstruction, comfortably. Nets are fixed to roof with suitable "ENDFIXERS".
**Advantages of combination**

1. Total SAFE AND SPEEDY work on fragile A.C. Roofs.
2. Thousands of rooftop accidents every year, most of these fatal ones, can be eliminated.
3. A lightweight net facilitates quick, trouble free and its easy installation.
4. Nightmarish Installation of BULKY and CUMBERSOME nets below roof is avoided.
5. Shop floor activity is not required to be stopped.
6. Laying, spreading, fixing, uninstalling is EASY and not time consuming.
7. Easy for storage.
8. Each panel can be packed and stored separately.
9. Available in standard panel lengths and widths. YOU plan your work in your chamber.
10. Availability of this SAFE COMBINATION would avoid friction between management & contractor in deciding the rates of the work.
11. Availability of this SAFE COMBINATION would encourage the worker to work at hazardous heights.
This system is to be laid ON TOP of the roof and not below the roof. It should facilitate fixing the same to the protruding roof hooks, enabling every activity of roof maintenance including changing of Roof Sheets.

This system consists of the following:

A light weight roof net with its fixing attachments and accessories conforming to pending Patent application No. 1388 / MUM / 04 Dtd. 22/12/2004.

**Material**
- H.D.P.E. rope 2 mm.
- Body rope: IS marked by dia. approx H.D.P.E. rope 6 mm.
- Border rope: (Garware-Wall Ropes or equivalent) dia. approx

**Construction**
- Knotted construction with interlocked border

**Opening**
- 70 mm X 70 mm. mesh

**Configuration**
- One set of TEN systems. Each system consisting of following:
  - Net of Standard Panel Size 15 Ft. X 5 Ft. 1 No
  - Endfixers 23 long 10 Nos. / set
  - Midfixers - 6 long 6 Nos. / set
  - Eccentric Clamps 10 Nos.
  - Ball Nuts 16 Nos
  - Bolt Extension accessories 6 Nos.
Rooftop Safety System:

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Part Name EP                 Elevating Pads                    18 Nos
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Steps should have inserts of Aluminium, giving clearance of 0.1 mm over the Dia of Rivets.

Brackets are made from Glass filled Nylon - Grade Virgin Nylon-66.

Rivets are hollow rivets, having good shear strength.

Saddles are made from Virgin Low Density Polypropylene.

Anti-skid padding should be made from Natural Rubber.

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