PRÉVENTEX
www.preventex.qc.ca

PRÉVENTEX

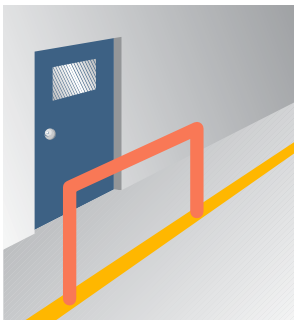
TRAFFIC LANES

Traffic Safety

Préventex

Association paritaire du textile

INFORMATION BULLETIN
Volume 17, number 5
December 2000



Activity is often intense in industrial plants: production, transportation of goods, workers moving from one place to another, maintenance, machinery repairs, etc. There are risks of accidents in many areas of a plant, including traffic lanes. This information file is about traffic lanes and shows you how to plan them and lay them out in the best possible way to avoid accidents.

PLANNING

If there are no traffic lanes in your workplace, here is an ideal opportunity to plan them carefully. This is actually a responsibility of employers under the regulation derived from the Act respecting occupational health and safety.

What are the factors to consider in planning traffic lanes ?

- The intensity of vehicle and pedestrian traffic
- Maximum dimensions in relation to the types of vehicle used and goods transported
- The use of traffic lanes in case of emergency evacuation

What are the rules to observe ?

- Plan the lanes to allow free circulation of people and transported goods
- Where possible, for safety reasons, lay out SEPARATE lanes for pedestrians
- Avoid having lanes run through work stations
- Plan one-way lanes for intense traffic areas
- Direct pedestrian traffic to face oncoming forklift trucks

LAYOUT

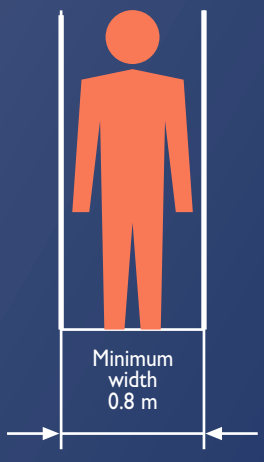
Width and clearance

The width and clearance of traffic lanes are essential considerations in ensuring safety. Think of pedestrian circulation first and then of forklift trucks.

Here are the minimum dimensions suggested by Préventex:

Pedestrian traffic lanes

- Pedestrians alone: 0.8 m



The Préventex newsletter is published by
Préventex – Association paritaire du textile
2035, Victoria avenue, suite 203
Saint-Lambert QC J4S 1H1
Telephone: (450) 671-6925
Fax: (450) 671-9267
e-mail: asptexti@mlink.net
www.preventex.qc.ca

General manager and newsletter editor
Jean-Marc Champoux

Co-chairman (Employers)
Jacques Hamel
Cavalier Textiles inc.

Co-chairman (Unions)
Pierre-Jean Olivier
TUAC/COUTA

Coordination
Lise Laplante

Copy editor
Pierre Bouchard
Indico Communication

Translation
Paule Champoux-Blair

Graphic design
Anne Brissette Graphiste

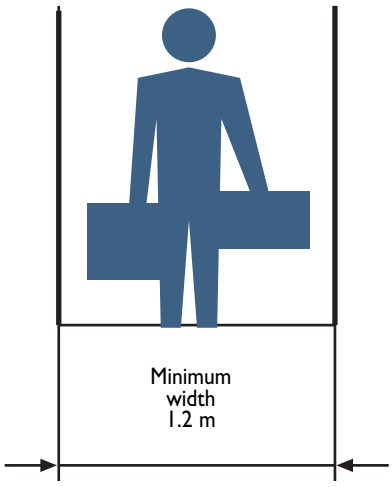
Printing
Imprimerie For inc.

Préventex, its managers and personnel, as well as authors of articles published in the Préventex newsletter make no guarantee as to the accuracy of the information contained therein nor as to the pertinent efficiency that may be inferred from this information, and therefore accept no responsibility. The information contained in the newsletter should not be considered professional advice. Mention of products or services by advertisers or in articles does not constitute an endorsement or recommendation of same.

The Préventex newsletter is distributed free of charge to members of the textile and knitting industries in the Province of Québec. Its contents may be duplicate provided prior authorisation is obtained from Préventex and the source is mentioned.

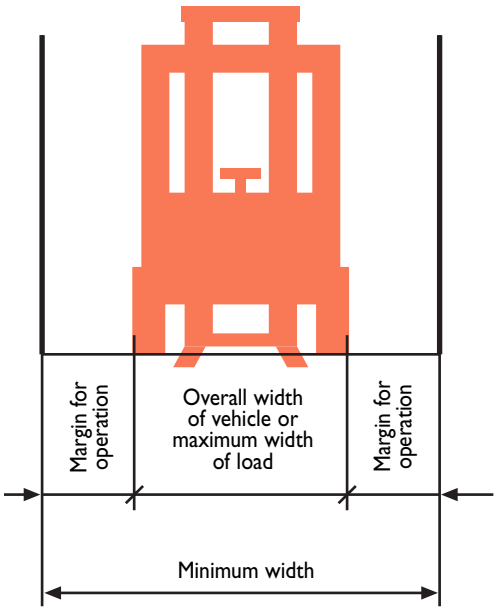
Legal deposit:
September 1st, 1994
ISSN 0825-4230
Printing: 2500 copies

- Pedestrians carrying loads: 1.2 m or more, according to load



Forklift truck lanes

Determine the overall width of the forklift truck or its widest possible load, then add 0.5 m on each side to facilitate operation.

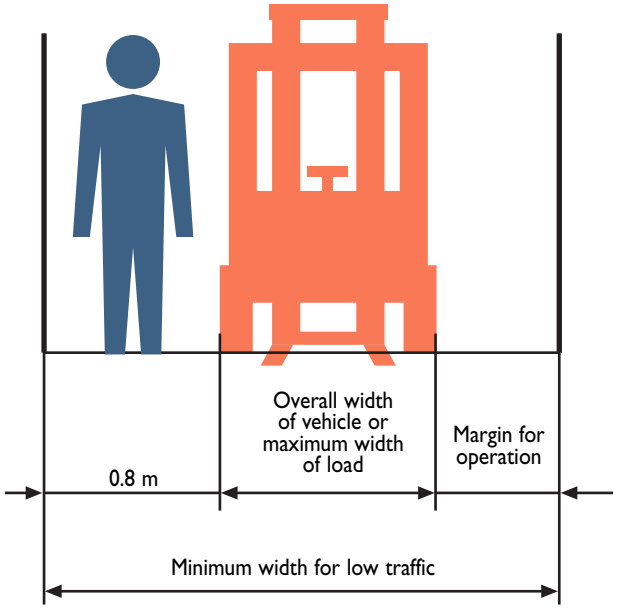


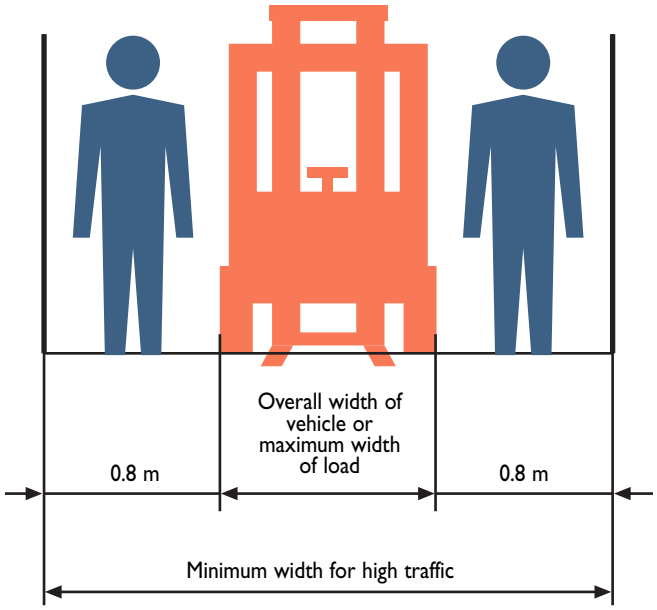
Two-way traffic lanes for forklift trucks

Determine the overall width of the loader or its widest possible load, then add 0.5 m on each side to facilitate operation. Allow a 0.4 m distance between two passing forklift trucks.

Lanes for use of both pedestrians and forklift trucks

Determine the overall width of the forklift trucks or its widest possible load, then add 0.8 m for pedestrian traffic and 0.5 m to facilitate operation. For two-way pedestrian traffic, add 0.8 m for second pedestrian.





Reading material

How to select marking materials and equipment; Better roads, vol. 65/No. 4, 1995, pp. 15-16

Circulation dans l'entreprise : la bonne trajectoire ; Travail & Sécurité, No. 7-8, Juillet-Août 1988, pp. 375-383

Voies de circulation à l'intérieur de l'entreprise ; Caisse nationale suisse d'assurance en cas d'accidents, Lucerne, Suisse, 1986, 16 pages

Implantation des lieux de travail ; Institut national de recherche et de sécurité, Paris, INRS, in : Cahiers de notes documentaires, No 174, 1er trimestre 1999, pp.15-35

Manutention et circulation dans les usines : une implantation rationnelle facteur de sécurité ; Institut national de recherche et de sécurité, Paris, INRS, in : Cahiers de notes documentaires, No. 78, 1er trimestre 1975, pp. 37-47

Programmer la prévention : une démarche essentielle pour concevoir des locaux de travail ; Caisse régionale d'assurance maladie Rhône-Alpes, Service de prévention, Lyon, 1997

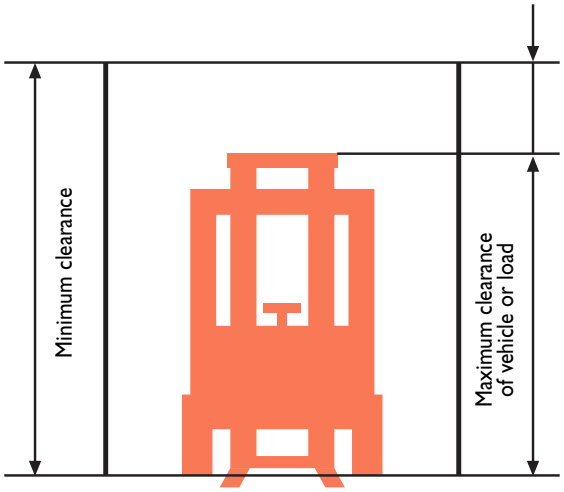
Ergonomic Design for people at work. Volume 1, workplace, equipment and environmental design and information transfer ; Eastman Kodak Company, Human Factors Section, New York : Van Nostrand Reinhold, 1983, 406 pages

La circulation dans l'entreprise ; Institut national de recherche et de sécurité, Paris INRS, 1988, 30 pages

Conception ergonomique des espaces de travail en bureaux ; Association française de normalisation, Paris la Défense, 1998, 13 pages

Clearance

Pedestrian: allow a 2 m clearance from floor, unless a warning is posted.



Forklift trucks: measure the maximum height of the vehicle or its highest possible load and add 0.3 m.

Curves

When planning curves, take into account the wider turning clearance of vehicles in use at your workplace.

Intersections

Define priority access at intersections. Priority lanes should be marked accordingly.

Take care not to stack products or goods higher than 1.5 m so that they do not obstruct the view for pedestrians and forklift operators.

Place barriers near doors, at office and cafeteria exits and other strategic locations to prevent pedestrians from directly accessing traffic lanes.

Doors

Doors should be at least as wide as the traffic lanes and in a straight line with them.

The height of doors should be planned according to the height of the maximum forklift load, plus 0.3m.

For prevention purposes, it is recommended to indicate the maximum clearance on the mast of forklift trucks and on doors.

If traffic lanes are used for emergency evacuation of the building, the following criteria apply:

- **They should be clear and clean at all times.**
- **They should have a minimum width of 1200 mm if used for direct access to emergency exits.**
- **They should have a minimum light reading of 50 lux at floor level.**

CONFIGURATION

All traffic lanes should be CLEARLY MARKED and FREE OF OBSTRUCTIONS.

The floor markings should be clear. For example, traffic lanes could be marked out with 10 cm yellow lines. It is not necessary to mark out lanes that are lined with installations, equipment, walls or stored goods.

Lanes should be kept in good condition and free of all obstructions. Traffic lanes that are cluttered or allowed to become slippery because of surface wear or humidity quickly become workplace hazards.

Install ramps where there is a danger of falls.

Finally, put up mirrors at intersections and in blind corners, and post adequate, road-style signs.

LIGHTING

Traffic lanes should be WELL LIT.

As a rule, a light reading of 50 lux at floor level is a minimum requirement, to be increased at intersections.

INFORMATION

Once your traffic lanes are planned, laid out and configured, inform the staff. Why not post a plan of the lanes ? All workers will be able to consult the plan. If needed, hold a meeting or designate a person responsible for passing on the information.

AVOID PITFALLS

Avoid:

- Lanes that are too wide and that will encourage increasingly haphazard heaps of parts, boxes, cases, etc.
- Lanes that allow forklift trucks to pass through work stations.
- Piles of goods that obstruct the view for pedestrians and forklift operators.
- Lanes with too many sharp bends and narrow sections.

Source of illustrations

Voies de circulation à l'intérieur de l'entreprise ; Caisse nationale suisse d'assurance en cas d'accidents, Lucerne, Suisse, 1986, 16 pages

Quizz

1. What is the minimum width of traffic lanes for pedestrians only ?
2. What is the minimum width of traffic lanes for pedestrians carrying loads ?

TRUE OR FALSE ?

3. To determine the width of forklift lanes, the overall width of the forklift is taken into account.
4. The maximum clearance of forklift traffic lanes is determined by adding 0.3 m to the maximum clearance or load of forklifts.
5. It is best to use a road-style signs in traffic lanes.
6. If doors are wide enough, they do not need to be in a straight line with lanes.
7. Where possible, pedestrian traffic lanes should be separate from the lanes used by forklift trucks.
8. There is no need for mirrors at intersections; honking the horn is sufficient.
9. A light reading of 50 lux at floor level provides adequate lighting.
10. The wider the lanes, the better.

Answers

1. 0,8 m ; 2. 1,2 m ; 3. F ; 4. T ; 5. T ; 6. F ; 7. T ; 8. F ; 9. T ; 10. F

Omissionm

In the Préventex Information Bulletin on muskulo-skeletal disorders (Volume 17, number 4), credits for illustrations were inadvertently omitted. The figures were taken from a document entitled *Les LATR - Mieux les comprendre pour mieux les prévenir*, published by the joint sector-based Association of Occupational Health and Safety, Metal and Electrical Products Industry (ASPME), and the Institut de recherche Robert-Sauvé en santé et sécurité du travail (IRSST). Préventex regrets the omission.