18. Subject to section 26 of the Engineers Act, the holder of a certificate of authorization may use the title of "consulting-engineer" only for public relations and advertising purposes relating to the holder's professional services.

The holder of a certificate of authorization shall not use the title of "engineer" without the word "consulting" to qualify it.
19. The holder of a certificate of authorization may not obtain a seal issued by the Order.

## PART VII

SANCTIONS
20. The Bureau may impose one or more of the sanctions provided in section 21 on an enterprise which is holder of a certificate when it establishes that the enterprise:
$1^{\circ}$ obtained its certificate of authorization fraudulently or by false representations;
$2^{\circ}$ is bankrupt; or
$3^{\circ}$ does not meet the obligations set out in sections 16,17 or 18 .
21. In any of the cases provided for in section 20 , the Bureau may impose on the holder of a certificate of authorization one or more of the following sanctions:
$1^{\circ}$ the temporary or permanent revocation of the holder's certificate of authorization;
$2^{\circ}$ a penalty of no less than $600 \$$ and no more than $6000 \$$.

For purposes of this section, when an offence is continuous, its continuity shall constitute a separate offence, day by day.
22. Before making a decision pursuant to sections 20 and 21, the Bureau may appoint one or more persons to investigate and report back to the Bureau.

The mandate of the investigators shall be for a period of one year and is renewable.

The investigators shall assume their duties after having been sworn in under oath or having made a solemn declaration in the form provided for in schedule II of the Professional Code and shall remain in office until they die, resign, are replaced or are struck off the Order's Roll of Members.
23. The Bureau issues the decisions referred to in sections 20 and 21 after having considered the whole file and after having provided to the enterprise the opportunity to be heard either through its representive or other duly authorized delegate of the enterprise.
24. In case of revocation of a certificate of authorization by the Bureau, the representative shall return the certificate of authorization to the Secretary within 5 days of a request by the Secretary to this effect.

## PART VIII <br> TRANSITIONAL AND FINAL PROVISIONS

25. Every enterprise existing at the time of coming into force of the present regulation and which offers or provides professional services to another or which implements EPC or EPCM Projects for which professional services are provided other than in accordance with subparagraph 2 of the second paragraph of section 2 shall have 4 months, commencing from the date of the coming into force of the present regulation, to obtain a certificate of authorization.
26. The Bureau may impose on an enterprise the penalty set out in subsection 21(2) when it establishes that the enterprise offers or provides professional services to another or implements EPC or EPCM Projects for which professional services are provided contrary to subparagraph 2 of the second paragraph of section 2.

Sections 22 and 23 apply, mutatis mutandis, to the decision of the Bureau.

For purposes of this section, when an offence is continuous, its continuity shall constitue a separate offence, day by day.
27. The provisions of the present regulation come into force on the fifteenth day following the day of its publication in the Gazette officielle du Québec.

9661

## Draft Regulation

Transport Act
(R.S.Q., c. T-12)

## Road vehicles used for the transportation of school children

Notice is hereby given, in accordance with sections 10 and 11 of the Regulations Act (R.S.Q., c. R-18.1), that the Regulation respecting road vehicles used for the
transportation of school children, the text of which appears below, may be made by the Government upon the expiry of 45 days following this publication.

The draft regulation is intended to replace the Regulation respecting motor vehicles used for the transportation of schoolchildren, made by Order in Council 957-83 dated 11 May 1983.

Its principal objective is to update the standards for the manufacture of school buses and school minibuses. It also seeks to improve visibility for drivers at the front of the vehicle, where the risk of accidents is high.

The draft regulation is also intended to improve the standards for use of vehicles transporting school children.

To achieve these goals, it proposes the following measures, in particular:

- uniformizing the standards for the manufacture of conventional school buses, "flat-nosed" school buses and minibuses;
— improving visibility for drivers at the front and on the sides of the vehicle through the use of new mirrors for which installation standards are prescribed in the Regulation;
- uniformizing the safety equipment;
- clarifying the standards for use, such as the standards concerning the number of passengers and safety equipment;
- harmonizing the standards with those prescribed in other regulations.

To date, study of this matter has shown the following implications for the public and for businesses, in particular, small and medium-sized businesses:

- The proposed measures have the advantage of fulfilling the expectations expressed by those involved in the transportation of school children.
- The standards for manufacture will be adapted to current needs with respect to both safety and technological development.
- The standards are drafted in such a way as to allow for technological changes without having to resort to amending regulations, thereby permitting manufacturers in many cases to choose appropriate means to comply with those standards.
- Starting from 1 July 1996, date of the coming into force of the Regulation, carriers of school children acquiring new automotive equipment will be required to purchase buses and minibuses that comply with the Regulation. The same holds true for the standards for use since drivers will be subject to new restrictions related to the number of passengers or to new obligations related to the transportation of handicapped school children.
- Consistency with other regulations will prevent the duplication of rules, particularly with respect to mechanical inspection and record keeping for vehicles.

Additional information can be obtained by contacting Mr. Claude Martin, Acting Director, Transport terrestre des personnes, ministère des Transports, 700, boulevard René-Lévesque Est, $24^{\circ}$ étage, Québec (Québec), G1R 5H1; tel. (418) 643-3660, fax (418) 646-4904.

Any interested person having comments to make concerning this matter is asked to send them in writing, before the expiry of the 45 -day period, to the Minister of Transport, 700, boulevard René-Lévesque Est, 29 ${ }^{\circ}$ étage, Québec (Québec), G1R 5H1.

Jacques Brassard,
Minister of Transport

## Regulation respecting road vehicles used for the transportation of school children

Transport Act
(R.S.Q., c. T-12, s. 5, par. $a$ )

## CHAPTER I

GENERAL

1. Where the transportation of school children referred to in sections 229, 454 and 461 of the Highway Safety Code (R.S.Q., c. C-24.2) is not incorporated into the public transport service of the holder of an urban transport permit within the meaning of section 22 of the Bus Transport Regulation made by Order in Council 1991-86 dated 19 December 1986 or of a public body providing public transport within the meaning of the second paragraph of section 3 of that Regulation, such transportation shall be carried out by means of a school bus, a school minibus or a vehicle used for the transportation of school children.
2. A vehicle is a school bus or a school minibus where
(1) it bears the national safety mark or the label bearing a statement of compliance referred to in sections 3 and 6, respectively, of the Motor Vehicle Safety Regula-
tions (R.R.C., c. 1038), as those sections read at the time they must be applied; or
(2) in the case of a vehicle whose chassis was built before 1 July 1996, it bears the inscriptions prescribed in section 30 , is equipped with the flashing lights and the compulsory stop signal prescribed in sections 34 and 35, is painted with the colour and in the manner prescribed in section 11 and meets the standards set forth in sections $8,10,15,19,29$ and 31 and in the second paragraph of section 33 .

A bus or minibus referred to in subparagraph 1 of the first paragraph shall comply with the provisions of Chapter II.
3. An urban bus intended for use in the public transport service of a permit holder or of a public body providing public transport is deemed to be a school bus for the purposes of section 1 where that urban bus bears the inscriptions prescribed in section 30 , is equipped with the flashing lights prescribed in section 34 and is used under a contract concluded with a school board or a private educational institution for the exclusive purpose of transporting school children.
4. An automobile is a vehicle used for the transportation of school children where the manufacturer has fitted it with at least 4 seat belts, a hard roof and at least 3 side doors with windows, and where it is used under a contract concluded with a school board or a private educational institution for the exclusive purpose of transporting school children.
5. A school bus or school minibus may be adapted to make it accessible to handicapped school children.

The following provisions of the Regulation respecting road vehicles adapted for the transportation of handicapped persons, made by Order in Council 1058-93 dated 21 July 1993, take precedence over the provisions of this Regulation:
(1) sections 15,19 to 21 and 26 , in respect of doors;
(2) sections 22 and 46 , in respect of emergency exits;
(3) sections 39 to 42 , in respect of seat belts and wheelchair positions;
(4) sections 47 to 50 , in respect of power lift platforms; and
(5) sections 51 to 55 , in respect of loading ramps.
6. For the purposes of this Regulation, "school bus" means a school bus or a school minibus referred to in section 2, irrespective of its mass, and "bus of more than 4500 kg " means a school bus referred to in section 2 whose total loaded mass, as indicated by the manufacturer, is greater than 4500 kg .

## CHAPTER II

STANDARDS FOR THE MANUFACTURE AND DESIGN OF SCHOOL BUSES AND SCHOOL MINIBUSES

## DIVISION I

CHASSIS AND BODY
7. A school bus shall be manufactured in such a manner that
(1) it is no more than 12.20 m long, measured from bumper to bumper;
(2) the length of its rear cantilever is less than onethird of its total length;
(3) its turning radius is no more than 13 m where its wheelbase is 6700 mm or less, and no more than 13.5 m where its wheelbase is greater than 6700 mm ;
(4) where it is fitted with side rails, they are manufactured in one piece between the front hanger of the front spring and the rear hanger of the rear spring;
(5) the load exerted on each axle corresponds to at least $30 \%$ of both the total loaded mass and the net mass;
(6) if its suspension is equipped with leaf springs, it has a device preventing misalignment of the front axle in the case of breakage; and
(7) its exhaust pipe and muffler are attached to the chassis without passing through the passenger compartment.
8. The body of a school bus shall be manufactured in such a manner as to prevent the entry of dust and water, and the cowl shall be sealed in such a manner as to prevent the entry of gas fumes.
9. The combustion rate or flame spread rate of the materials used in the manufacture of the body shall be less than 101.6 mm per minute, measured in accordance with the test method referred to in section 302 of the Motor Vehicle Safety Regulations (R.R.C., c. 1038) as they read at the time they must be applied.
10. The side walls of the body of a school bus shall be provided with rub rails attached horizontally, one at the level of the seat cushions and the other at the floorline. The rub rail at the level of the seat cushions shall make a complete circuit around the passenger compartment.

The rub rails shall be
(1) of 16-gauge sectional or triangular steel, or of any other metal having the same structural features as such steel;
(2) at least 100 mm wide; and
(3) attached to each post of the passenger compartment.

To avoid permanent distortion resulting from a collision with a snow bank, a bus of more than 4500 kg shall also be provided, on the lower part of its skirt, with a strengthening rail complying with subparagraph 1 of the second paragraph.
11. The body of a school bus shall be painted with chrome yellow paint and the hood shall be painted with lustreless black paint.

The chassis, rub rails and inscriptions shall be black, as shall the contour of the flashing lights. The bumpers shall be black or dark grey.

Strips of yellow reflective tape may be attached to the body and the bumpers.
12. Electrical wiring shall be covered with an additional protective sheath where it passes through the wall of a school bus. All joints shall be made with appropriate connectors or shall be welded.
13. Every electrical circuit shall be identified in such a manner as not to be confused with the others and, except for the starting circuit, shall be protected by a circuit breaker.
14. The bumpers of a school bus, except for the bumper guards, shall be capable of withstanding pushing by another bus of the same mass on level ground without suffering permanent distortion and shall be capable, in those same conditions, of preventing permanent distortion to the chassis or body. The rear bumper shall be attached directly to the chassis frame in such a manner as to make it impossible to ride on it or cling to it.
15. The exhaust pipe of a school bus shall
(1) allow the exhaust to be expelled at the rear of the bus or at the left side, between the rear wheel and the corner of the rear bumper;
(2) where located at the rear of the bus, extend beyond the body but shall not extend beyond the bumper by more than 2 cm ; and
(3) be attached in such a manner that the exhaust is not directed underneath a door or a window that can be opened.
16. A bus of more than 4500 kg shall be manufactured in such a manner that its brake system permits visual inspection of brake lining wear without removal of any chassis component.

## DIVISION II

## PASSENGER COMPARTMENT

17. The passenger compartment of a school bus shall have a clearance of at least 1.6 m , except a school bus of more than 4500 kg , whose passenger compartment shall have a clearance of at least 1.8 m .
18. A school bus shall have no more than 14 rows of seats. The seats shall be at least 380 mm deep.

The distance between the surface of a seat back and the seat back in front of it shall be no less than 600 mm and no more than 620 mm measured horizontally at the centre of the seat back.
19. The aisle shall be at least 300 mm wide, but shall be at least 380 mm wide at the top of the seat backs on each side.
20. Chip board and other composite boards shall not be used in the manufacture of school bus floors.
21. The floor covering shall be
(1) permanently attached by means of waterproof adhesive material, with all joins sealed; and
(2) made of rubber or a material having similar properties, at least 3 mm thick except in the aisle and on the steps, where it shall be at least 4.5 mm thick and shall be ribbed.
22. The steps of a school bus shall be of equal height and shall be located inside the passenger compartment. The first step shall be no more than 400 mm from the ground, measured when there are no passengers on the bus.
23. A school bus shall be provided with lighting making it possible to light up the aisle and the steps. The lighting for the steps shall automatically light up when the door opens and the bus's parking lights are on.
24. The stickers bearing instructions for opening windows used as emergency exits shall be attached in such a manner that they cannot be removed without a tool.
25. The service door of a school bus shall
(1) be located on the right hand side, opposite the driver;
(2) be designed in such a manner that its frame provides clearance at least 584 mm wide and at least 1240 mm high. In the case of a bus of more than 4500 kg , the frame shall provide clearance at least 610 mm wide and at least 1720 mm high;
(3) be provided with flexible padding, to reduce the risk of injury to fingers;
(4) be provided with a device preventing any accidental opening of the door, with the device installed in such a manner as to prevent all risk of injury to persons getting on or off the school bus; and
(5) be openable manually from inside the passenger compartment in the case of break-down of its opening device.

The upper part of the door frame on the inside of the passenger compartment shall be padded in such a manner as to reduce the risk of accident when passengers are getting off the bus.
26. The defrosting system of a school bus shall make it possible to keep the part of the windshield wiped by the wipers completely free of condensation, frost and ice.

A hot air vent shall also be installed near the service door of a bus of more than 4500 kg , so as to accelerate the melting of snow and ice on the boarding step.
27. The entrance to a school bus shall be provided with a grab handle at least 250 mm long, attached no less than 50 cm but no more than 60 cm from the first step.
28. The greater part of the surface of the service door of a bus of more than 4500 kg shall consist of hermetically sealed glass panels. The distance between the bottom of those panels and the ground shall not be more than 900 mm , measured when there are no passengers on the bus, and the distance between the top of the
panels and the top of the door shall not be more than 152 mm .
29. The first 2 windows on either side of a bus of more than 4500 kg shall be double glazed and hermetically sealed.

## DIVISION III MANDATORY INSCRIPTIONS

30. The word "ÉCOLIERS" shall be painted or otherwise indicated on the outside walls of a school bus, above the windshield and the rear window. All the letters shall be black, at least 200 mm high and at least 32 mm wide.

In addition, the rear outside wall shall bear an inscription in black letters at least 75 mm high indicating to the drivers of other vehicles that they must stop when the lights of the school bus are flashing.
31. Subject to section 30 , no inscription or announcement shall be affixed to the inside or outside surfaces of a school bus, other than
(1) the inscription indicating the make and model of the vehicle, and the name and logo or abbreviation of the manufacturer and of the distributor of the vehicle;
(2) the manufacturer's instructions as to the operation and maintenance of the school bus and its equipment;
(3) the indications prescribed or authorized by a law or regulation;
(4) the rules concerning the behaviour and safety of passengers, if they are posted inside the passenger compartment;
(5) the name of the carrier, his logo or abbreviation, the name and logo or abbreviation of his association, and the number of the school bus, where those inscriptions are on the outside of the side walls; and
(6) the route number.

## DIVISION IV

SAFETY EQUIPMENT
32. Only safety equipment mentioned in this Division may be installed on the chassis, on the body or in the passenger compartment of a school bus.
33. A school bus shall be provided, at the front, with at least 2 mirrors each having an exposed surface of at
least $250 \mathrm{~cm}^{2}$ and reflecting the testing areas in accordance with the test method described in Schedule I. The mirrors shall be fully visible to the driver through the lower part of the windshield wiped by the wipers.

A school bus shall also be provided with a mirror installed inside the passenger compartment and allowing the driver to see the passengers. In a bus of more than 4500 kg , that mirror shall be at least 750 mm wide and at least 150 mm deep.
34. A school bus shall be provided with flashing red lights, 2 at the front and 2 at the rear. Those lights shall be visible by day at a distance of not less than 150 metres and shall operate at a rate of 60 to 120 cycles per minute.

Those lights shall meet the requirements of sections 5.22.2.1 to 5.22.2.5 of C.S.A. Standard D250-M1985 "School Buses", published in August 1985 by the Canadian Standards Association, 178 Rexdale Blvd., Rexdale (Toronto), Ontario, M9W 1R3. Their beam shall cover an angle of not less than
(1) 10 degrees above and 10 degrees below the central horizontal axis of the light; and
(2) 30 degrees on each side of the central longitudinal axis of the light, parallel to the longitudinal axis of the school bus.
35. A school bus shall be provided with an extendable stop sign or with a stop sign attached to an extendable arm, located on the outside of the passenger compartment, on the front left side, level with the driver's seat.

The stop sign shall be provided with alternately flashing red lights which operate simultaneously with the flashing lights.
36. Where a school bus is equipped in front with a safety device that may be operated by the driver to keep school children at a distance from the vehicle, the crossing control arm shall
(1) be designed in such a manner that a force of 50 newtons applied to its centre is sufficient to push or pull the arm;
(2) be fully extended and at right angles to the bus within no less than 2 seconds and no more than 4 seconds of being activated; and
(3) not have any points or sharp edges.

The end of the crossing control arm shall be visible to the driver when his eyes are positioned 68.6 cm above the meeting point of the seat back and the seat cushion, with the seat in the middle position at which it can be adjusted sliding backwards and forwards and in its lowest position. A visual indicator may be installed at the end of a crossing control arm to enhance its visibility.

## CHAPTER III

STANDARDS FOR USE

## DIVISION I <br> VEHICLE USED FOR THE TRANSPORTATION OF SCHOOL CHILDREN

37. The owner of a vehicle used for the transportation of school children shall install, from side to side across the middle of the vehicle's roof, a yellow sign bearing the word "ÉCOLIERS". Each letter shall be black, at least 200 mm high and at least 32 mm wide.
38. The driver of a vehicle used for the transportation of school children shall not leave the vehicle when there are school children on board, except to assist a handicapped school child who requires his assistance in getting into or out of the vehicle. In such instance, the driver shall turn off the engine, remove the switch key and apply the hand brake, except where the vehicle has a safety locking device which prevents any person other than the driver from setting the vehicle in motion.
39. The driver of a vehicle used for the transportation of school children shall ensure that the passengers buckle their seat belts, except in the case provided for in section 398 of the Highway Safety Code (R.S.Q., c. C-24.2).
40. The driver of a vehicle used for the transportation of school children shall assist any handicapped school child who requires assistance in getting into or out of the vehicle.

## DIVISION II

## SCHOOL BUSES

41. The owner of a school bus shall
(1) ensure that the inscriptions prescribed in section 30 are legible and complete; and
(2) maintain the interior of the passenger compartment or cause it to be maintained in such a manner as to ensure the comfort and safety of passengers.
42. The owner of a school bus shall not install a portable seat or a folding seat in his vehicle, nor cause or allow such a seat to be so installed.
43. Between the fifteenth day of October and the first day of May, the owner of a school bus shall ensure that at least the driving wheels are equipped with tires designed for driving on snow-covered road surfaces.
44. The owner of a school bus shall provide his vehicle with the following items and shall ensure that they are kept in good condition:
(1) at least 3 lamps or reflectors complying with section 86.3 of the Regulation respecting the mechanical inspection and safety standards for road vehicles, made by Order in Council 2069-82 dated 15 September 1982, as that Regulation reads at the time it must be applied;
(2) a chemical fire extinguisher complying with section 22.1 of the Regulation respecting the mechanical inspection and safety standards for road vehicles, installed near the front door in a compartment accessible to the driver; and
(3) a first-aid kit complying with paragraph 5 of section 65 of the Regulation respecting road vehicles adapted for the transportation of handicapped persons, made of rust-proof metal or any other non-corrosive material having similar resistance, placed near the driver's seat and clearly identified.

Where a box of tools is placed in the passenger compartment, the owner of the school bus shall ensure that it is attached and does not hamper passenger movement.
45. The driver of a school bus shall not leave the vehicle when there are school children on board, except to assist a handicapped school child who requires his assistance in getting into or out of the vehicle. In such instance, the driver shall turn off the engine, remove the switch key and apply the hand brake, except where the school bus has a safety locking device which prevents any person other than the driver from setting the vehicle in motion.
46. The driver of a school bus shall not authorize nor allow more than 3 school children to sit on the seat of a school bus.
47. In addition to section 46 , the driver of a school bus shall ensure that school children being transported are seated safely and that the aisle is free of obstructions.
48. The driver of a school bus shall ensure that the access to the emergency door is unhampered and free of obstructions.
49. The driver of a school bus, when transporting a handicapped school child, shall
(1) assist the child in getting on and off the bus, where the child requires his assistance;
(2) immobilize the child's wheelchair, if he has one, and ensure that the seat belt that must be worn by the child is buckled before continuing his route;
(3) assist a child whose wheelchair cannot be immobilized or a child whose handicap does not affect his mobility, so that such school children sit on the seats; and
(4) refuse to transport a child whose wheelchair cannot be immobilized and who cannot sit on a seat.

In the situation contemplated in subparagraph 4 of the first paragraph, the driver shall not continue his route until he has informed the child's parents or the person having parental authority of his refusal, or until he has placed the child in the care of a person of full age who agrees to look after him.

## CHAPTER IV <br> PROCEEDINGS

50. Penal proceedings shall be instituted against the following persons or bodies for the following offenses against the provisions of this Regulation:
(1) where an owner using a school bus contravenes any of the provisions of sections 1,7 to 29 , the second paragraph of section 30 or sections 31 to 36;
(2) where a school board or a private institution using a school bus that it owns and operates contravenes any of the sections referred to in paragraph 1 ;
(3) where an owner using a vehicle used for the transportation of school children contravenes any of the provisions of section 37 ; or
(4) where a person holding a bus transport permit or a public body providing public transport and using an urban bus contravenes any of the provisions of section 30 or 34, where that person or body has entered into an exclusive contract to transport school children.
51. For the purposes of this Chapter, the following persons are deemed to be owners: any person who acquires or possesses a school bus or a school minibus or a vehicle used for the transportation of school children under a title of ownership involving a condition or term giving him the right to become the owner thereof, or
under a title giving him the right to use it as the owner thereof charged to deliver over.

The same applies to a person who leases a road vehicle contemplated in the first paragraph for a period of at least one year.
52. This Regulation replaces the Regulation respecting motor vehicles used for the transportation of schoolchildren, made by Order in Council 957-83 dated 11 May 1983.
53. This Regulation comes into force on 1 July 1996.

## SCHEDULE I

(s. 33)

TEST METHOD FOR DETERMINING THE EXPOSED SURFACE AND EFFECTIVE SURFACE OF THE MIRRORS LOCATED AT THE FRONT OF THE BUS

The following are the steps to be used for the test method:

1. As illustrated in Figure A, place cylinders 30 cm in diameter and 30 cm long in front of the bus and along its sides in the following positions:

- 3 cylinders placed tangentially to the transversal plane, along the foremost part of the front bumper; one of those cylinders shall be placed at either end of the bumper and one in the middle;
- one cylinder placed in front of the bus, along the projection of its longitudinal axis, at the shorter of the following distances from the bus:
- the distance at which the upper end of the cylinder starts to be directly visible to the driver when his eyes are positioned 68.6 cm above the meeting point of the seat back and the seat cushion, with the seat in the middle position at which it can be adjusted sliding backwards and forwards and in its lowest position; or
- the distance at which the centre of the cylinder is 3.65 meters from the bumper;
- 4 cylinders placed 30 cm from the vertical projection of the side wall of the bus, directly facing the centre of the front and rear wheels; and
- 2 cylinders placed 1.83 m from the vertical projection of the side wall of the bus, directly facing the centre of the rear wheel.

2. Draw lines delimiting the following testing areas, as illustrated in Figure A:

- the ground area within a 2 -m perimeter of the bus;
- the ground area in front of the bus, extending beyond the $2-\mathrm{m}$ perimeter but lying within lines delimiting a $7-\mathrm{m}$ extension of the side walls of the bus; and
- the side walls and front of the bus to a height of less than 1.5 m .

3. Adjust the mirrors in such a manner as to limit the area reflected as much as possible to the testing areas while ensuring that the upper end of the cylinders is fully visible. Each mirror must reflect the front cylinders and the cylinders placed along the same side as the mirror.
4. Take a photograph of the mirrors as seen by the driver. The photograph must include the calibrated distance marks on each mirror.
5. Using as calibrated grid placed on the photograph, measure the exposed surface of the mirror, which must be greater than $250 \mathrm{~cm}^{2}$.
6. Using the grid referred to in point 5 , measure the surface of the mirror that reflects the testing areas. That surface must correspond to at least $65 \%$ of the exposed surface.

FIGURE A

METHOD FOR DETERMINING
THE EXPOSED SURFACE AND AND EFFECTIVE SURFACE


