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 STATUTORY INSTRUMENTS
 

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1966 No. 856

## HORTICULTURE

**The Horticultural Improvements (Standard Costs) Regulations  
1966**

<i>Made</i>	- - -	14th July 1966
<i>Laid before Parliament</i>		26th July 1966
<i>Coming into Operation</i>		1st August 1966

The Minister of Agriculture, Fisheries and Food and the Secretary of State, acting jointly in exercise of the powers conferred upon them by sections 3 and 6 of the Horticulture Act 1960(a) (including the powers conferred upon them by the said section 3 as applied by section 3(2) of the Agriculture and Horticulture Act 1964(b), which latter section is by virtue of section 8 of that Act to be construed as one with Part I of the Horticulture Act 1960) and of all other powers enabling them in that behalf, with the approval of the Treasury, hereby make the following regulations:—

1. These regulations, which may be cited as the Horticultural Improvements (Standard Costs) Regulations 1966, shall apply throughout the United Kingdom and shall come into operation on 1st August 1966.

2.—(1) In these regulations, unless the context otherwise requires—

“ appropriate Minister ” means the Minister of Agriculture, Fisheries and Food in relation to England or Wales or Northern Ireland and the Secretary of State in relation to Scotland;

“ approved ” means approved by the appropriate Minister;

“ of framed construction ” means, in relation to a building, constructed in such a manner that the roof is supported on stanchions, pillars or posts independently of the walls;

“ of traditional construction ” means, in relation to a building, constructed in such a manner that the roof is supported on load-bearing walls;

“ operation ” means an operation falling within section 1(1) or (2) of the Horticulture Act 1960 or, in the case of operation 79, falling within section 3(1) of the Agriculture and Horticulture Act 1964, which is of a description specified in column 1 of Part I of Schedule 1 to these regulations and which is carried out in accordance with—

- (a) the requirements set out in relation to that operation in column 2 of that Part of that Schedule, and
- (b) such of the general specifications set out in Schedule 2 to these regulations as relate to that operation or the materials used in carrying it out.

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 (a) 1960 c. 22.

(b) 1964 c. 28.

(2) In these regulations, any operation referred to by a number means the operation so numbered in Part I of Schedule 1 to these regulations; and, in relation to any such operation, "requirements" means the requirements there set out in relation to that operation.

(3) The Interpretation Act 1889(a) shall apply to the interpretation of these regulations as it applies to the interpretation of an Act of Parliament.

(4) These regulations shall have effect only as respects operations included in proposals which are approved while the regulations are in force; and the Horticultural Improvements (Standard Costs) Regulations 1960(b) and the Horticultural Improvements (Standard Costs) Regulations 1963(c), as amended by the Horticultural Improvements (Standard Costs) (Amendment) Regulations 1964(d), shall not have effect as respects any such operation.

3. The standard cost of any operation shall be an amount calculated at the appropriate rate or rates specified in respect of that operation in column 3 of Part I of Schedule 1 to these regulations:

Provided that the amount so calculated shall, in any of the circumstances referred to in Part II of Schedule 1 to these regulations, be varied in accordance with the provisions there set out relating to the circumstances.

In Witness whereof the Official Seal of the Minister of Agriculture, Fisheries and Food is hereunto affixed on 7th July 1966.

*Frederick Peart,*

(L.S.)

Minister of Agriculture, Fisheries and Food.

Given under the Seal of the Secretary of State for Scotland on 12th July 1966.

(L.S.)

*William Ross,*

Secretary of State for Scotland.

Approved.

14th July 1966.

*Harry Gourlay,*

*W. Howie,*

Two of the Lords Commissioners of Her Majesty's Treasury.

(a) 1889 c. 63.

(c) S.I. 1963/1292 (1963 II, p. 2211).

(b) S.I. 1960/736 (1960 I, p. 255).

(d) S.I. 1964/967 (1964 II, p. 2189).

**SCHEDULE 1**

**PART I**

Where any rate set out in this Part of this Schedule in respect of any operation is a rate per unit of measurement, any fraction of a unit shall be disregarded for the purpose of calculating the cost of that operation.

In this Part of this Schedule the expression " floor area " means—

- (a) in relation to operation 4, the floor area between the outside edges of the stanchions;
- (b) save as aforesaid, in relation to a building, the internal floor area.

Operation	Requirements	Rate
Column 1	Column 2	Column 3
<b>BUILDINGS</b>		
<p>1. Totally enclosed general purpose building of traditional construction.</p>	<p>The building shall have a minimum internal width of 15' 0". Adequate doors, windows, roof lights and ventilation shall be provided in accordance with the needs of the building.</p>	<p align="right">£ s. d.</p> <p>Per square foot of floor area</p> <p>(a) where the height between floor and eaves is less than 12' 0" but not less than 8' 0"</p> <p>(i) for the first 1,000 square feet ... .. 16 8</p> <p>(ii) for the next 2,000 square feet ... .. 12 2</p> <p>(iii) for the next 2,000 square feet ... .. 10 4</p> <p>(iv) thereafter ... .. 8 6</p> <p>(b) where the height between floor and eaves is less than 14' 0" but not less than 12' 0"</p> <p>(i) for the first 1,000 square feet ... .. 19 9</p> <p>(ii) for the next 2,000 square feet ... .. 13 6</p> <p>(iii) for the next 2,000 square feet ... .. 11 0</p> <p>(iv) thereafter ... .. 10 4</p> <p>(c) where the height between floor and eaves is less than 16' 0" but not less than 14' 0"</p> <p>(i) for the first 1,000 square feet ... .. 1 1 9</p> <p>(ii) for the next 2,000 square feet ... .. 14 0</p> <p>(iii) for the next 2,000 square feet ... .. 11 8</p> <p>(iv) thereafter ... .. 11 4</p> <p>(d) where the height between floor and eaves is not less than 16' 0"</p> <p>(i) for the first 1,000 square feet ... .. 1 3 8</p> <p>(ii) for the next 2,000 square feet ... .. 14 8</p> <p>(iii) for the next 2,000 square feet ... .. 11 10</p> <p>(iv) thereafter ... .. 11 6</p>

Operation	Requirements	Rate
Column 1	Column 2	Column 3
2. Totally enclosed general purpose building of framed construction.	The building shall have a minimum width of 15' 0". Adequate doors, windows, roof lights and ventilation shall be provided in accordance with the needs of the building.	<p style="text-align: right;">£ s. d.</p> Per square foot of floor area (a) where the height between floor and eaves is less than 12' 0" but not less than 8' 0" (i) for the first 1,000 square feet ... .. 15 0 (ii) for the next 2,000 square feet ... .. 9 10 (iii) for the next 2,000 square feet ... .. 8 6 (iv) thereafter ... .. 7 4 (b) where the height between floor and eaves is less than 14' 0" but not less than 12' 0" (i) for the first 1,000 square feet ... .. 18 6 (ii) for the next 2,000 square feet ... .. 10 2 (iii) for the next 2,000 square feet ... .. 9 10 (iv) thereafter ... .. 9 0 (c) where the height between floor and eaves is less than 16' 0" but not less than 14' 0" (i) for the first 1,000 square feet ... .. 1 0 6 (ii) for the next 2,000 square feet ... .. 10 4 (iii) for the next 2,000 square feet ... .. 10 2 (iv) thereafter ... .. 9 10 (d) where the height between floor and eaves is not less than 16' 0" (i) for the first 1,000 square feet ... .. 1 2 3 (ii) for the next 2,000 square feet ... .. 11 0 (iii) for the next 2,000 square feet ... .. 10 6 (iv) thereafter ... .. 10 2
3. Open-fronted building of traditional construction.	The building shall have a minimum internal width of 18' 0" and a minimum height of 8' 0" to the eaves. Adequate natural lighting shall be provided in accordance with the needs of the building.	Per square foot of floor area (a) for the first 1,000 square feet ... .. 12 2 (b) for the next 2,000 square feet ... .. 9 10 (c) for the next 2,000 square feet ... .. 9 0 (d) thereafter ... .. 7 10
4. Dutch barn type of building or open-sided shed of, in either case, framed construction (excluding foundations).	(a) Where the frame includes stanchions of— (i) rolled steel joists, the stanchions shall be— (a) not less than 6" x 3" in the case of a building with a span not exceeding 21' 0" and a height not exceeding 16' 0" to the eaves;	Per square foot of floor area (a) if stanchions are of round wood (i) with 2 rows of stanchions ... .. 5 10 (ii) with 1 row of stanchions .... .. 5 4

- (b) not less than  $7'' \times 3\frac{1}{4}''$  in the case of a building with a span exceeding 21' 0" but not exceeding 25' 0" and a height not exceeding 16' 0" to the eaves;
- (c) not less than  $7'' \times 4''$  in the case of a building with a span exceeding 25' 0" but not exceeding 30' 0" and a height not exceeding 16' 0" to the eaves;
- (d) not less than  $7'' \times 4''$  in the case of a building with a span not exceeding 30' 0" and a height exceeding 16' 0" but not exceeding 18' 0" to the eaves;
- (e) not less than  $8'' \times 4''$  in the case of a building with a span not exceeding 30' 0" and a height exceeding 18' 0" but not exceeding 20' 0" to the eaves;
- (f) of an approved size in the case of a building with a span exceeding 30' 0" and a height not exceeding 20' 0" to the eaves.
- (ii) tubular steel, the frame shall be constructed in accordance with an approved design.
- (iii) wood, the frame shall be constructed of sound sawn wood in accordance with an approved design or, in approved cases, of round wood.
- (iv) precast reinforced concrete, the frame shall be constructed in accordance with an approved design.
- (b) The frame may be constructed partly of one and partly of another of the aforementioned materials in accordance with an approved design.
- (c) Roof principals and purlins shall be included in the design and shall be of steel, concrete, wood or aluminium alloy spaced at distances appropriate to the roof covering material used.
- (d) The gable ends shall be sheeted down to eaves level with galvanised steel, asbestos cement or other approved material.

(b) if stanchions are of any other approved type			
(i) with 2 rows of stanchions	...	...	6 6
(ii) with 1 row of stanchions	...	...	5 10
plus for each square foot of floor area in relation to one building			
(a) for the first 1,000 square feet	...	...	10
(b) for the next 1,500 square feet	...	...	6

5. Store.

- (a) The building shall be of traditional or framed construction and shall have a minimum height of 8' 0" to the eaves and a concrete floor.

Per square foot of floor area			
(a) for the first 150 square feet	...	...	1 8 3
(b) for the next 850 square feet	...	...	15 10

Operation	Requirements	Rate			
Column 1	Column 2	Column 3			
				£	s. d.
5. Store— <i>cont.</i>	(b) Adequate doors, windows, roof lights and ventilation shall be provided in accordance with the needs of the building.				
6. Mushroom house (conventional design).	<p>(a) The building shall be of traditional or framed construction and shall have a minimum internal width of 15' 0" and a minimum height of 8' 0" to the eaves.</p> <p>(b) Adequate doors and ventilation shall be provided in accordance with the needs of the building.</p> <p>(c) External walls shall be of brick, concrete blocks, hollow clay blocks or other approved material and shall be of continuous cavity or other approved equivalent form of construction.</p>	<p>Per square foot of floor area</p> <p>(a) for the first 1,000 square feet ... .. 15 4</p> <p>(b) for the next 2,000 square feet ... .. 10 8</p> <p>(c) for the next 2,000 square feet ... .. 9 0</p> <p>(d) thereafter ... .. 7 8</p>			
7. Rhubarb shed (conventional design).	<p>(a) The building shall be of traditional or framed construction and shall have a minimum internal width of 15' 0" and a height of not less than 5' 0" and of not more than 8' 0" to the eaves.</p> <p>(b) Adequate doors and ventilation shall be provided in accordance with the needs of the building.</p> <p>(c) External walls shall be of brick, concrete blocks or hollow clay blocks, and not less than 9" thick in each case, or of other approved material and construction.</p>	<p>Per square foot of floor area</p> <p>(a) for the first 1,000 square feet ... .. 13 8</p> <p>(b) for the next 2,000 square feet ... .. 11 0</p> <p>(c) for the next 2,000 square feet ... .. 9 4</p> <p>(d) thereafter ... .. 8 0</p>			
8. Mushroom house or rhubarb shed with curved or cranked roof sheeting.	<p>(a) The building shall be constructed of curved or cranked roof sheeting arched over and supported by brick or concrete sills. If of curved sheeting, side walls shall be provided, which shall not be less than 2' 6" high above ground level at either side. The building shall have a minimum internal width of 18' 0" and a height of not less than 10' 0" to the crown of the roof.</p> <p>(b) The end walls shall be carried to the full height of the building.</p> <p>(c) External dwarf and end walls shall be of brick, concrete blocks, hollow clay blocks or other approved material and shall be of continuous cavity or other approved equivalent form of construction.</p> <p>(d) Adequate doors and ventilation shall be provided in accordance with the needs of the building.</p>	<p>Per square foot of floor area</p> <p>(a) for the first 500 square feet ... .. 9 4</p> <p>(b) thereafter ... .. 5 0</p>			







	are used, adequate means of filling the spaces between the dollies shall be provided to make the glasshouse draught proof.							
17. Mobile glasshouse constructed of wood and glazed with sheets of unframed glass.	The glasshouse shall conform to all the requirements for operations 12 and 16.	Per square foot of glazed area (a) where the cost of materials is included and (i) each sheet of glass is 28½" wide or less (ii) each sheet of glass is more than 28½" wide ... .. (b) cost of labour only ... ..	4 5 4 2 9					
18. Mobile glasshouse constructed of metal and glazed with framed lights.	The glasshouse shall be of approved design and materials. The glass shall weigh not less than 24 oz. per square foot. Doors and ventilators shall be provided as necessary. The glasshouse shall be mounted on rails and wheels supported either by side walls of approved materials and construction or by concrete dollies set securely in the ground. Where dollies are used, adequate means of filling the space between the dollies shall be provided to make the glasshouse draught proof.	Per square foot of glazed area (a) where the cost of the material is included (b) cost of labour only ... ..	3 11 3					
19. Mobile glasshouse constructed of wood and glazed with framed lights.	The glasshouse shall conform to all the requirements for operation 18.	Per square foot of glazed area (a) where the cost of materials is included ... .. (b) cost of labour only ... ..	3 2 3					
20. Rail for mobile glasshouse.	The rail shall be of material, shape and size suitable for the purpose and be securely fixed to a wall, to dollies or to the glasshouse.	Per foot run ... ..	2 3					
21. Concrete dolly to support the rail of a mobile glasshouse when it is moved, not including the wheel but including the chair.	—	Per dolly ... ..	1 0 0					
22. Wheel to work with concrete dolly.	—	Per wheel ... ..	10 0					

Operation	Requirements	Rate
Column 1	Column 2	Column 3
£ s. d.		
<b>FOUNDATIONS FOR BUILDINGS OF FRAMED CONSTRUCTION</b>		
23. Foundations for stanchions of steel, concrete, aluminium alloy, or wood, embedded in concrete.	The foundations shall be constructed as specified in British Standard 205:1965.	Per upright ... .. 4 9 4
24. Foundations for wooden stanchions erected on concrete.	The foundations shall be of concrete and of dimensions below ground as specified in British Standard 2053:1965. The wooden stanchions shall not be embedded in the concrete but shall be secured either to two lengths of steel or to a concrete spur or spurs of a size to suit the wood. The steel or spur or spurs shall be embedded not less than 2' 0" deep in the concrete foundations and shall rise up the wooden stanchions above ground level to an approved height. The stanchions shall be securely bolted to the steel or to the concrete spur or spurs using an approved type of timber connector throughout.	Per upright
		(a) with steel lengths ... .. 5 16 6 (b) with concrete spur or spurs ... .. 4 9 4
25. Foundations for wooden stanchions embedded in the ground.	The holes shall be not less than 4' 6" deep and shall be dug out by manual labour. At the bottom of each hole there shall be placed a pad of concrete not less than 6" thick on which the stanchion shall rest. The soil shall be replaced in layers, each layer being well rammed.	Per upright ... .. 1 12 9
<b>EXCAVATION AND HARDCORE FILLING</b>		
26. Excavation.	—	Per cubic yard ... .. 9 6
27. Hardcore filling.	Broken brick, stone or any other approved material shall be used.	Per cubic yard ... .. 17 9

WALLING, CLADDING AND RENDERING

The rates specified in relation to operations 28 to 33 inclusive include the foundations (except for operation 33), and any necessary doors, windows, damp-proof course and ventilators.

28. Brick or clay block walling.	<p>(a) The walling shall be constructed of good quality bricks or blocks, bonded and set in mortar and pointed as required. The bricks or blocks shall in all cases comply with British Standard 187:1955 (amended 1962) or British Standard 3921:1965.</p> <p>(b) If hollow clay blocks are used below ground level or are liable to side pressure, all cavities in the blocks so used shall be filled with concrete as the work proceeds. Where it is necessary to provide a good degree of weather resistance or insulation, walling of hollow blocks shall be rendered externally in the manner specified in the requirement for operation 34 or shall be constructed in two thicknesses of block with a continuous cavity between them.</p>	<p>Per square yard</p> <p>(a) not less than 4" thick ... .. 1 4 8</p> <p>(b) not less than 8" thick ... .. 2 6 10</p> <p>(c) not less than 10" thick with 2" cavity ... 2 12 2</p> <p>(d) not less than 13" thick ... .. 3 3 8</p>
29. Concrete block walling.	<p>(a) The walling shall be constructed of precast concrete blocks set in mortar. The blocks may be solid or hollow and shall in all cases comply with British Standard 2028:1953 (amended 1960 and 1964).</p> <p>(b) If hollow concrete blocks are used below ground level or are liable to side pressure, all cavities in the blocks so used shall be filled with concrete as the work proceeds. Where it is necessary to provide a good degree of weather resistance or insulation, walling of hollow blocks shall be rendered externally in the manner specified in the requirement for operation 34 or shall be constructed in two thicknesses of block with a continuous cavity between them.</p>	<p>Per square yard</p> <p>(a) not less than 4" but less than 6" thick ... 1 2 9</p> <p>(b) not less than 6" but less than 8" thick ... 1 10 4</p> <p>(c) not less than 8" thick ... .. 2 5 3</p> <p>(d) not less than 10" thick with 2" cavity ... 2 7 10</p>
30. Mass concrete walling.	<p>The walling shall be constructed of concrete poured into shuttering and thoroughly tamped down.</p>	<p>Per square yard</p> <p>(a) not less than 6" but less than 9" thick ... 1 9 8</p> <p>(b) not less than 9" thick ... .. 2 5 0</p>
31. Precast concrete panel walling.	<p>The panels shall be reinforced as necessary and shall be not less than 1½" thick.</p>	<p>Per square yard (including all necessary supports) 2 2 6</p>

Operation	Requirements	Rate
Column 1	Column 2	Column 3
32. Rubble stone walling.	The walling shall be not less than 18" thick and constructed of good stone set in mortar.	Per square yard ... .. £ s. d. 1 18 0
33. Cladding.	(a) The cladding shall be of galvanised steel sheeting, asbestos cement sheeting, aluminium alloy sheeting, aluminium sheeting, weather boarding not less than $\frac{3}{8}$ " thick, plywood not less than $\frac{1}{8}$ " thick bonded with resin of weather-and-boil proof grade, space boarding comprising 4" x $\frac{3}{4}$ " wood boards set vertically 1" apart and secured to wood, steel or concrete rails, or of any other approved material. (b) Where there is a risk near floor or ground level of cladding being rotted, corroded or fractured, and the appropriate Minister so requires, the bottom of the cladding shall overlap the top of a dwarf wall of brick, stone, mass concrete, concrete blocks or hollow clay blocks, high enough to keep the cladding clear of such risk.	Per square yard ... .. 1 1 2
34. Rendering new walls.	The rendering shall be not less than $\frac{1}{2}$ " thick and shall be applied in two coats, each not less than $\frac{3}{8}$ " thick, using mortar of a suitable mix.	Per square yard ... .. 6 6

## CONCRETING AND INSULATION TO FLOORS AND ROOFS

35. Concreting.	—	Per square yard (a) not less than 3" but less than 4" thick ... 8 10 (b) not less than 4" but less than 6" thick ... 11 9 (c) not less than 6" thick ... .. 17 9
36. Surface hardening of a concrete floor.	Where approved, the additional surface treatment of a concrete floor shall be such as to produce a uniform, hard and dust free surface.	Per square yard of floor area ... .. 10

37. Waterproof membrane to concrete floor.	Two coats of an approved bituminous compound or other approved waterproofing material shall be applied to the concrete surfaces.	Per square yard ... .. 3 2
38. Floor insulation for buildings for purposes other than temperature controlled storage.	The insulation shall be constructed of hollow clay blocks, expanded polystyrene, resin-bonded glass fibre or other approved material laid on a waterproof membrane and covered with a protective finish of a mix of 1 part cement and 3 parts sand, to a thickness of not less than 1½".	Per square yard (including waterproof membrane) 13 0
39. Roof insulation.	Insulation to the underside of roof slopes or to suspended ceilings shall be of approved materials and construction sufficient to provide a U-value not more than 0.20. It may take the form of "sandwich" construction laid on top of purlins or of suspended type below purlins. Vapour barriers must be provided to protect the insulation from condensation and the effect of humidity within the building.	Per square yard ... .. 5 3

**SUSPENDED FLOOR**

40. Suspended floor, including supporting piers, columns or stanchions and trap-doors, wells and access stairs or ladders but excluding any guard-rail or hand-rail.	<p>(a) The floor shall be constructed—</p> <p>(i) of boarding of not less than 1" nominal thickness with wooden joists: where intermediate supporting beams are required, they shall be of wood, steel or concrete, of approved design in each case; or</p> <p>(ii) of reinforced concrete cast in situ or of approved hollow or solid concrete beams or blocks or of approved hollow clay blocks supported on steel or reinforced concrete beams: in each case, the floor shall have a cement rendered finish; or</p> <p>(iii) in accordance with an approved proprietary design.</p> <p>(b) Supporting piers, columns or stanchions shall be of brick, concrete, steel, wood or other approved material.</p>	<p>Per square foot</p> <p>(i) (a) for imposed load of not less than 100 lbs. but less than 200 lbs. ... .. 5 10</p> <p>(b) for imposed load of not less than 200 lbs. ... .. 6 9</p> <p>(ii) (a) for imposed load of not less than 100 lbs. but less than 200 lbs. ... .. 6 9</p> <p>(b) for imposed load of not less than 200 lbs. ... .. 8 9</p> <p>(iii) for imposed load of not less than 200 lbs. ... .. 8 9</p>
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S.I. 1966/856

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Operation	Requirements	Rate
Column 1	Column 2	Column 3

£ s. d.

## TEMPERATURE CONTROLLED STORAGE

## 41. Insulation of walls, floors and ceiling of each storage chamber.

The standard of insulation to be provided for walls and ceiling shall be as follows:—

Operating Temperatures		U-value (B.T.U./sq. ft./°F/hour)	
Above 38°F (3·3°C)	... ..	not more than	0·09
38°F (3·3°C) and below	... ..	less than	0·07

## Special Requirement:—

Where it is necessary to maintain a temperature within critical limits of plus or minus 1°F (0·55°C) for temperatures 38°F (3·3°C) and below a value of not more than 0·06 will be required.

For floors a U-value of not more than 0·16 will be required. For the purpose of calculating the standard of insulation the structural walls, floor and ceiling of the chamber shall be excluded.

(a) The lining to walls shall consist of a coat of cement rendering where required, and sufficient thickness of an approved insulating material or materials fixed with a suitable adhesive and covered on exposed surface with an approved finish.

(b) The lining to ceilings shall consist of sufficient thickness of an approved insulating material or materials fixed with a suitable adhesive and covered on exposed surface with an approved finish.

(c) Where of framed construction walls and ceilings shall consist of pressure-treated wood or other approved material to which is fixed a sufficient thickness of approved insulating material or materials covered on face with an approved finish.

## (a) Per square foot

(i) for U-values not more than 0·09 and not less than 0·07	... ..	7	4
(ii) for U-values less than 0·07	... ..	7	8

## (b) Per square foot

(i) for U-values not more than 0·09 and not less than 0·07	... ..	6	0
(ii) for U-values less than 0·07	... ..	6	8

## (c) Per square foot

(i) for U-values not more than 0·09 and not less than 0·07	... ..	8	8
(ii) for U-values less than 0·07	... ..	9	4

(d) The floor lining shall in all cases consist of a cement screed, a sufficient thickness of insulating material or materials fixed with an approved adhesive where required and covered with a layer of reinforced concrete not less than 2" thick or other approved finish.

Exposed surfaces where gas-proofing is required shall be treated with a coating of an approved gas-proofing compound or covering of gas-proof sheeting properly jointed. Vapour barriers shall be provided where required together with adhesive layers for the proper securing of the insulation.

(d) Per square foot ... .. 5 0

RACKS, BENCHES AND GUARD-RAIL OR HAND-RAIL

42. Racks.

(a) The racks shall be free-standing and of approved design and construction. The shelves shall be solid or slatted and made of wood or other approved material and properly supported on a rigid frame of wood or metal.

(b) If racks are made of dressed softwood, shelves or slats shall be of not less than ¾" nominal thickness and slats shall be not more than 2" apart; legs, rails and braces shall be of not less than 1½" nominal thickness.

Per square foot of shelf area (each shelf included) 4 0

43. Benches.

(a) The benches shall be free-standing, not less than 2' 3" high and of approved design and construction. The bench tops shall be made of wood or other approved material and properly supported on a rigid frame of wood or metal.

(b) If benches are made of dressed softwood, the minimum dimensions shall be—  
 (i) for bench tops, 1" nominal thickness;  
 (ii) for legs, 2" x 2" nominal;  
 (iii) for rails and braces, 2½" x 1½" nominal.

Per square foot of bench top ... .. 5 0

Operation	Requirements	Rate
Column 1	Column 2	Column 3
44. Guard-rail or hand-rail.	(a) If constructed of wood, the rail shall be— (i) either supported by wooden uprights not more than 6' 0" apart or secured to a wall; and (ii) not less than 3' 0" nor more than 3' 6" high from the floor. The size of the wood shall be not less than 3" × 2" nominal throughout.	Per foot run ... .. £ s. d. 1 2
	(b) If constructed of galvanised tubular steel or other approved material, the rail shall be— (i) either supported by uprights of approved material not more than 6' 0" apart or secured to a wall; and (ii) not less than 3' 0" nor more than 3' 6" high from the floor. The steel tube shall be of medium gauge not less than 1 $\frac{29}{32}$ " outside diameter. Other approved materials shall be at least equivalent in strength to a medium gauge steel tube of 1 $\frac{29}{32}$ " outside diameter.	Per foot run ... .. 3 4

## DRAINAGE OF YARDS AND BUILDINGS

45. Salt-glazed stoneware piping laid on the trench bottom.	Trenches shall be excavated to proper falls and gradients and the pipes shall conform to British Standard 65:1963 and shall be jointed in cement and laid in straight runs with all necessary bends and junctions. Excavated material shall be replaced and consolidated and the surplus removed.	Per yard run (a) with pipes of not less than 4" in diameter ... 16 4 (b) with pipes of not less than 6" in diameter ... 1 1 0
46. Cast-iron piping laid on the trench bottom.	The work shall be carried out as specified in the requirement for operation 45 save that the pipes shall be jointed in lead and shall conform to British Standard 437:1933 (amended 1943) or, in the case of "spun" pipes, to British Standard 1211:1958.	Per yard run (a) with pipes of not less than 4" in diameter ... 1 18 8 (b) with pipes of not less than 6" in diameter ... 2 17 0



47. Jointed pitch-fibre piping.	Trenches shall be excavated to proper falls and gradients and the pipes shall conform to British Standard 2760:1956 (amended 1961 and 1963) and shall be jointed and laid in straight runs with all necessary bends and junctions. Excavated material shall be replaced and consolidated and the surplus removed.	Per yard run (a) with pipes of not less than 4" in diameter ... 11 9 (b) with pipes of not less than 6" in diameter ... 19 6
48. Unjointed piping.	The piping shall be constructed of unglazed earthenware or porous concrete pipes of not less than 4" in diameter and shall be laid on the bottom of a trench to an average depth of not less than 1' 6". Where necessary the piping shall be surrounded with shingle or clinker before the excavated material is replaced. Trenches shall be excavated to proper falls and gradients.	Per yard run (a) not surrounded with shingle or clinker ... 5 0 (b) surrounded with shingle or clinker ... 6 2
49. Manhole or inspection chamber.	The manhole or chamber shall have a minimum internal area of 6 square feet. It shall comprise brick or solid concrete block or precast reinforced concrete walls not less than 9" thick on a foundation of concrete at least 4" thick, and internal faces shall be rendered with a mix of 1 part cement and 3 parts sand. All necessary traps, bends, channels and junctions shall be provided, and shall be benched with fine concrete. The inspection cover shall be of reinforced cast concrete or other approved pattern.	Per manhole or chamber ... .. 12 5 4
50. Trapped or inspection gully for disposal of soil and surface water drainage from buildings.	The gully shall be of glazed stoneware made to an approved pattern. A galvanised or coated iron grating shall be provided with a diameter of at least 6" if round, or at least 6" along each side if rectangular. Outlet pipes shall be at least 4" in diameter. The gully shall be set on a concrete base, haunched with concrete and connected to the drainage system.	Per gully ... .. 1 16 10
51. Trapped gully for disposal of yard drainage.	The gully shall be a glazed stoneware inspection gully of an approved pattern and shall be provided with a heavy pattern hinged galvanised or coated iron grating with a diameter of at least 10" if round, or at least 9" along each side if rectangular. Outlet pipes shall be at least 4" in diameter. The gully shall be connected to a drainage system and have a minimum depth of 12", and shall be set on a concrete base and surrounded with concrete.	Per gully ... .. 3 12 10

Operation	Requirements	Rate						
Column 1	Column 2	Column 3						
							£ s. d.	
52. Tank for sludge, settling, washing, water storage or other approved purpose.	The side walls of the tank shall be of brick, solid concrete blocks, mass concrete or other approved material, reinforced as necessary. The tank may be circular or rectangular in plan. The walls shall be erected on a concrete base at least 6" thick. Brick and concrete block walling and floor shall be rendered internally with a mix of 1 part cement and 3 parts sand in the manner specified in the requirement for operation 34. The tank may be constructed with or without a baffle wall.	Per cubic foot of gross capacity						
		(a) for the first 150 cubic feet	...	...	...	...	...	8 6
		(b) for the next 150 cubic feet	...	...	...	...	...	3 3
		(c) for the next 500 cubic feet	...	...	...	...	...	2 10
		(d) thereafter	...	...	...	...	...	2 0
53. Cover for tank for sludge, settling, washing, water storage, or other approved purpose.	The cover shall be— (a) of reinforced concrete, steel, cast iron or other approved material, supports or bearers being provided as may be necessary; or (b) of reinforced concrete, steel or other approved material, supported on piers, stanchions or walls, and designed to carry a load of not less than 200 lbs. per square foot.	Per square foot	...	...	...	...	...	2 6
		Per square foot	...	...	...	...	...	6 10
54. Soakaway.	The required area shall be excavated and filled with broken brick or stone. The soakaway shall have a minimum capacity of 1 cubic yard.	Per soakaway	...	...	...	...	...	1 9 8
55. Ducting.	The floor of the ducting shall be constructed of concrete at least 4" thick. The side walls shall be constructed of brick, mass concrete or solid concrete blocks not less than 4½" thick. The ducting shall be covered with a slab of concrete not less than 3" thick, or of other approved material, with suitable reinforcement where subject to traffic of heavy loading. The minimum cross-sectional area inside the duct shall be 4½ square feet.	Per yard run	...	...	...	...	...	3 12 8

**INTERNAL PLUMBING AND SERVICES**

56. Galvanised steel piping.	The piping shall conform to British Standard 1387:1957 (amended 1962 and 1964).	<p>Per foot run</p> <p>(a) with <math>\frac{1}{2}</math>" diameter piping ... .. 1 4</p> <p>(b) with <math>\frac{3}{4}</math>" diameter piping ... .. 1 10</p> <p>(c) with 1" diameter piping ... .. 2 4</p> <p>(d) with <math>1\frac{1}{4}</math>" diameter piping ... .. 3 0</p> <p>(e) with <math>1\frac{1}{2}</math>" diameter piping ... .. 3 8</p>
57. Polythene piping.	The piping shall conform to British Standards 3284:1963 (amended 1964) or 1972:1961 (amended 1963). It shall be used only for cold water services and waste pipes. The jointing shall be of an approved type.	<p>Per foot run</p> <p>(a) with <math>\frac{1}{2}</math>" diameter piping ... .. 1 9</p> <p>(b) with <math>\frac{3}{4}</math>" diameter piping ... .. 2 6</p> <p>(c) with 1" diameter piping ... .. 3 9</p> <p>(d) with <math>1\frac{1}{4}</math>" diameter piping ... .. 4 4</p> <p>(e) with <math>1\frac{1}{2}</math>" diameter piping ... .. 5 10</p>
58. Polyvinyl chloride piping (unplasticised).	The piping shall conform to Table 2 of British Standard 3505:1962 (amended 1963 and 1964) Type 1420. It shall be used only for cold water services and waste pipes. The jointing shall be of an approved type.	<p>Per foot run</p> <p>(a) with <math>\frac{1}{2}</math>" diameter Class C piping ... .. 1 0</p> <p>(b) with <math>\frac{3}{4}</math>" diameter Class C or D piping ... .. 1 3</p> <p>(c) with 1" diameter Class C or D piping ... .. 1 6</p> <p>(d) with <math>1\frac{1}{4}</math>" diameter Class B, C or D piping... .. 1 10</p> <p>(e) with <math>1\frac{1}{2}</math>" diameter Class B, C or D piping... .. 2 3</p>
59. Copper piping.	<p>(a) The piping shall conform to British Standard 659:1963.</p> <p>(b) The minimum gauge shall be 19 gauge for piping of <math>\frac{1}{2}</math>" or <math>\frac{3}{4}</math>" diameter and 18 gauge for piping of 1", <math>1\frac{1}{4}</math>" or <math>1\frac{1}{2}</math>" diameter.</p>	<p>Per foot run</p> <p>(a) with <math>\frac{1}{2}</math>" diameter piping ... .. 2 4</p> <p>(b) with <math>\frac{3}{4}</math>" diameter piping ... .. 3 3</p> <p>(c) with 1" diameter piping ... .. 4 10</p> <p>(d) with <math>1\frac{1}{4}</math>" diameter piping ... .. 6 0</p> <p>(e) with <math>1\frac{1}{2}</math>" diameter piping ... .. 6 9</p>

**EXTERNAL COLD WATER SUPPLIES (UNDERGROUND)**

60. Galvanised steel piping.	<p>(a) The piping shall conform to British Standard 1387:1957 (amended 1962 and 1964) and shall be of heavy quality.</p> <p>(b) The pipe materials, the diameter of the pipes used and the manner in which the pipes are laid shall be in accordance with the requirements of the water-undertaking.</p>	<p>Per foot run</p> <p>(a) with <math>\frac{1}{2}</math>" diameter piping ... .. 2 0</p> <p>(b) with <math>\frac{3}{4}</math>" diameter piping ... .. 2 4</p> <p>(c) with 1" diameter piping ... .. 2 10</p> <p>(d) with <math>1\frac{1}{4}</math>" diameter piping ... .. 3 6</p> <p>(e) with <math>1\frac{1}{2}</math>" diameter piping ... .. 4 2</p>
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Operation	Requirements	Rate	
Column 1	Column 2	Column 3	
61. Polythene piping.	(a) The piping shall conform to British Standards 1972:1961 (amended 1963) or 3284:1963 (amended 1964) and shall be of heavy gauge. (b) Requirement (b) for operation 60 shall be complied with.	Per foot run	£ s. d.
		(a) with $\frac{1}{2}$ " diameter piping ... ..	2 2
		(b) with $\frac{3}{4}$ " diameter piping ... ..	2 4
		(c) with 1" diameter piping ... ..	3 3
		(d) with $1\frac{1}{4}$ " diameter piping ... ..	4 3
62. Polyvinyl chloride piping (unplasticised).	(a) The piping shall conform to Table 2 of British Standard 3505:1962 (amended 1963 and 1964) Type 1420. The jointing shall be of an approved type. (b) Requirement (b) for operation 60 shall be complied with.	Per foot run	
		(a) $\frac{1}{2}$ " diameter Class D piping ... ..	1 4
		(b) $\frac{3}{4}$ " diameter Class C or D piping ... ..	1 6
		(c) 1" diameter Class C or D piping ... ..	1 10
		(d) $1\frac{1}{4}$ " diameter Class B, C or D piping ... ..	2 3
		(e) $1\frac{1}{2}$ " diameter Class B, C or D piping ... ..	2 4
		(f) 2" diameter Class B, C or D piping ... ..	2 10
		(g) $2\frac{1}{2}$ " diameter Class B, C or D piping ... ..	3 10
		(h) 3" diameter Class B, C or D piping ... ..	4 8
		(i) 4" diameter Class B, C or D piping ... ..	6 4
63. Copper piping.	(a) The piping shall conform to British Standard 1386:1957 (amended 1962 and 1964). (b) The maximum gauge shall be— (i) for $\frac{1}{2}$ " diameter piping, 18 gauge; (ii) for $\frac{3}{4}$ " diameter piping, 17 gauge; (iii) for 1" diameter piping, 16 gauge; (iv) for $1\frac{1}{4}$ " diameter piping, 16 gauge; (v) for $1\frac{1}{2}$ " diameter piping, 15 gauge. (c) Requirement (b) for operation 60 shall be complied with.	Per foot run	
		(a) with $\frac{1}{2}$ " diameter piping ... ..	3 4
		(b) with $\frac{3}{4}$ " diameter piping ... ..	4 6
		(c) with 1" diameter piping ... ..	6 4
		(d) with $1\frac{1}{4}$ " diameter piping ... ..	8 0
		(e) with $1\frac{1}{2}$ " diameter piping ... ..	10 8
<b>ROADS</b>			
64. Soil cement road.	The road shall be constructed according to an approved technique and only after a test of the soil has demonstrated its suitability for stabilization with cement. A double bituminous surface dressing shall be applied as specified in requirement (b) for operation 65.	Per square yard (including double surface dressing) 8 2	

65. New road made with broken stone or ungraded materials.	<p>(a) The surface of the land shall be trimmed and shaped to the width required with the minimum amount of disturbance; all soft wet pockets shall be cut out to the necessary depth and filled with hard material, well rammed; any areas of loose soil shall be compacted. The broken stone or ungraded materials shall be spread evenly in two layers of approximately equal thickness to produce, after compaction, a total thickness of approximately 6". Each layer shall be thoroughly compacted. Where the resulting surface is of open texture, it shall be blinded with suitable fine material and re-rolled.</p> <p>(b) When a bituminous surface dressing is required, it shall be applied in accordance with an approved modern technique. The binder may be hot tar, hot cutback bitumen or cold bitumen emulsion.</p>	Per square yard (a) without surface dressing ... .. 5 10 (b) each surface dressing ... .. 1 8
66. Improving existing road with broken stone or ungraded materials.	<p>(a) The existing surface shall be reshaped to even falls. All weak places shall be strengthened, major inequalities of profile remedied and depressions filled with suitable material thoroughly compacted. The surface shall then be covered evenly with material which shall be thoroughly compacted to a thickness of not less than 3".</p> <p>(b) Surface dressings, if required, shall be applied as specified in requirement (b) for operation 65.</p>	Per square yard (a) without surface dressing ... .. 3 4 (b) each surface dressing ... .. 1 8

CATTLE GRID

67. Cattle grid, installed, including excavation, ramps, supporting walls and guard fencing but excluding by-pass, gate and gate-posts.	<p>(a) Minimum dimensions:          Length between the faces of the supporting walls (in direction of road) 8' 6";          Width between the faces of the supporting side walls 8' 0";          Depth (from under-side of bars to floor) 10".</p>	Per grid ... .. 41 0 0
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Operation	Requirements	Rate
Column 1	Column 2	Column 3
67. Cattle grid, installed, including excavation, ramps, supporting walls and guard fencing but excluding by-pass, gate and gate-posts <i>—cont.</i>	<p>(b) Bars shall be galvanised tubes of not less than <math>1\frac{29}{32}</math>" outside diameter or rolled steel joists of not less than <math>3" \times 1\frac{1}{4}"</math> or of other approved material of equivalent strength spaced 5" clear of each other. There shall be not less than four intermediate supporting walls when galvanised tubes or materials of equivalent strength are used and not less than three when rolled steel joists or materials of equivalent strength are used. The intermediate supporting walls shall be of wood, concrete, brick (the foregoing materials shall be rounded off where they meet the bars), metal or of a combination thereof. Guard fencing shall be of an approved design and shall be erected immediately over the faces of the supporting side walls. On poorly draining soils an outlet for water from the pit shall be provided.</p> <p>(c) A grid to the above requirements set on the road surface with ramps at each end will be acceptable.</p>	£ s. d.

FENCES, HEDGES AND WALLS

68. Strained line wire fence.	<p>(a) Minimum dimensions of materials</p> <p>Straining posts: 7' 0" long; if of round wood, 7" in diameter at the top or, if sawn, 6" x 6"; if of reinforced concrete, 5" x 5".</p> <p>Struts: 6' 0" long; if of round wood, 4" in diameter at the smaller end or, if sawn, 4" x 4"; if of reinforced concrete, 4" x 3".</p> <p>Intermediate posts or stobs: if of wood, 5' 0" long and if round, 3" in diameter at the top or, if sawn, 3" x 3"; if of any other shape, to have an area of 7 square inches at the top; if of reinforced concrete, 5' 9" long and 4" x 4" at the base.</p> <p>Galvanised wire: if plain, No. 8 standard wire gauge or, in the case of wire with a tensile strength of not less than 70 tons per square inch, No. 10 standard wire gauge, if barbed, 4 point with barbs not more than 3" apart.</p>	<p>Per yard run</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">(a) with 3 line wires</td> <td style="width: 10%; text-align: center;">...</td> <td style="width: 10%; text-align: center;">...</td> <td style="width: 10%; text-align: center;">...</td> <td style="width: 10%; text-align: center;">...</td> <td style="width: 10%; text-align: right;">3 4</td> </tr> <tr> <td>(b) each additional line wire</td> <td style="text-align: center;">...</td> <td style="text-align: center;">...</td> <td style="text-align: center;">...</td> <td style="text-align: center;">...</td> <td style="text-align: right;">4</td> </tr> </table>	(a) with 3 line wires	...	...	...	...	3 4	(b) each additional line wire	...	...	...	...	4
(a) with 3 line wires	...	...	...	...	3 4									
(b) each additional line wire	...	...	...	...	4									

Galvanised staples: for wood posts No. 8 standard wire gauge  $1\frac{1}{2}$ " long; for reinforced concrete posts, hairpin staples of No. 11 standard wire gauge and of a length suitable for the post.

Strainers:  $12" \times \frac{1}{2}"$  galvanised eye bolts or other approved type of equivalent strength.

(b) Erection

Straining posts shall be sunk not less than 3' 0" in the ground and placed at each change of direction or acute variation of level and on the straight at intervals of not more than 150 yards. The end of each strut below ground shall rest on a base plate unless it is set in concrete. Intermediate posts or stobs shall be spaced at intervals of not more than 9' 0" from centre to centre except where otherwise required by the appropriate Minister. Line wires shall be strained tightly between straining posts: plain wire shall be attached thereto by galvanised strainers at both ends: barbed wire may be stapled to straining posts or attached thereto by galvanised strainers at one or both ends. The height of the fence from the ground shall be not less than 3' 6" to the top wire.

69. Strained line wire fence with droppers.

(a) Minimum dimensions of materials

Straining posts, struts, intermediate posts or stobs and strainers shall be as specified in requirement (a) for operation 68 save that struts shall be 9' 0" long. Galvanised wire: if plain, No. 10 standard wire gauge with a tensile strength of not less than 70 tons per square inch; if barbed, 4 point with barbs not more than 3" apart.

Droppers: length to be not less than  $2\frac{1}{2}$ " longer than the distance between the wires to be covered; if of wood, to be split chestnut pales or sawn battens; if of metal, to be of an approved design.

Galvanised staples: for wood posts, No. 8 standard wire gauge  $1\frac{1}{2}$ " long; for wood droppers, No. 12 standard wire gauge 1" long; for reinforced concrete posts, hairpin staples of No. 11 standard wire gauge and of a length suitable for the post.

Per yard run

(a) with 3 line wires, where the longest interval in the fence between straining posts and intermediate posts or stobs respectively does not exceed one of the following distances:-

Between			
Straining posts	Intermediate posts or stobs		
Yards	Feet		
160	24	...	2 4
160	40	...	2 0
180	90	...	1 9
220	165		1 6

(b) each additional line wire ... .. 4

Operation	Requirements	Rate								
Column 1	Column 2	Column 3								
69. Strained line wire fence with droppers— <i>cont.</i>	<p>(b) Erection</p> <p>The requirements for erecting straining posts, struts, intermediate posts and line wires shall be in all respects the same as for operation 68 save that straining posts shall be placed at intervals of not more than 220 yards, intermediate posts or stobs at intervals of not more than 55 yards, end concrete straining posts and struts shall be set in concrete to their full depth below ground. Each dropper shall be securely attached to each wire covered by it; droppers shall be so spaced that each wire is attached to a dropper or to a post at intervals not exceeding 11' 0". Droppers shall be kept clear of the ground. The height of the fence from the ground shall be not less than 3' 6" to the top wire.</p>	£ s. d.								
70. Woven wire fence.	<p>(a) Minimum dimensions of materials</p> <p>Straining posts, struts, galvanised line wire and galvanised staples shall be as specified in requirement (a) for operation 68.</p> <p>Intermediate posts or stobs shall be as specified in requirement (a) for operation 68 save that they shall be not less than 5' 6" long when used with a 45" roll.</p> <p>Woven wire mesh shall have top and bottom horizontal wires of No. 8½ standard wire gauge, intermediate horizontal wires of No. 11 standard wire gauge and vertical wires of No. 11 standard wire gauge; the 45" roll shall have 8 horizontal wires with vertical wires spaced 12" apart; the 36" roll shall have 6 horizontal wires with vertical wires spaced 12" apart; the 32" roll shall have 8 horizontal wires with vertical wires spaced 6" apart.</p> <p>Stretcher bars: if of round steel, ½" diameter; if of flat steel 1¼" × ¼".</p> <p>Strainers: 12" × ½" galvanised eye-bolts or 12" × ⅝" galvanised hook-bolts.</p>	<p>Per yard run</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">(a) with 45" roll ... ..</td> <td style="text-align: right; width: 20%;">4 8</td> </tr> <tr> <td>(b) with 36" roll ... ..</td> <td style="text-align: right;">3 10</td> </tr> <tr> <td>(c) with 32" roll ... ..</td> <td style="text-align: right;">4 10</td> </tr> <tr> <td>(d) each line wire above or below the roll ...</td> <td style="text-align: right;">4</td> </tr> </table>	(a) with 45" roll ... ..	4 8	(b) with 36" roll ... ..	3 10	(c) with 32" roll ... ..	4 10	(d) each line wire above or below the roll ...	4
(a) with 45" roll ... ..	4 8									
(b) with 36" roll ... ..	3 10									
(c) with 32" roll ... ..	4 10									
(d) each line wire above or below the roll ...	4									



	<p>(b) Erection Straining posts and intermediate posts or stobs shall be erected and spaced as specified in requirement (b) for operation 68, save that straining posts shall be placed at intervals of not more than 165 yards. The mesh shall be strained tightly between straining posts by means of stretcher bars at both ends. Each stretcher bar shall be attached to its straining post by no fewer than 3 strainers. Line wires shall be erected as specified in requirement (b) of operation 68. The height of the fence from the ground shall be in accordance with the style of fence used and the number of additional line wires, if any.</p>	
<p>71. Wooden post and rail (nailed) fence.</p>	<p>(a) Minimum dimensions of materials Posts 6' 6" long; if sawn, of not less than 5½" × 2½" section; if half-round, two posts from a log with a diameter of not less than 6" when barked and peeled. Rails, if sawn, 3½" × 1½"; if half-round, two rails from a pole with a diameter of not less than 4" under bark at the thinner end.</p> <p>(b) Erection Posts shall be spaced at intervals not exceeding 6' 0" from centre to centre and shall be sunk not less than 2' 6" below the ground. The height of the fence from the ground shall be not less than 3' 6" to the top of the top rail.</p>	<p>Per yard run (a) with 3 rails ... .. 13 2 (b) with 4 rails ... .. 15 6</p>
<p>72. Protective fence against rabbits and hares.</p>	<p>(a) Minimum dimensions of materials Wooden straining posts: 7' 3" long and, if round, 5" in diameter at the top or, if sawn, 4" × 4". Wooden struts: 7' 0" long and, if round, 4" in diameter at the smaller end, or, if sawn, 3½" × 3½". Wooden intermediate posts or stobs: 6' 0" long and, if round, 3" in diameter at the top or, if sawn, 3" × 3"; if of any other shape, to have an area of 7 square inches at the top. Galvanised wire: for line wires, if plain, No. 8 standard wire gauge or in the case of wire with a tensile strength of not less than 70 tons per square inch, No. 10 standard wire gauge; if barbed, 4 point with barbs not more than 3" apart.</p>	<p>Per yard run ... .. 6 4</p>

Operation	Requirements	Rate
Column 1	Column 2	Column 3
72. Protective fence against rabbits and hares— <i>cont.</i>	<p>For tie wire, No. 18 standard wire gauge. Galvanised staples: No. 8 standard wire gauge: 1½" long. Strainers: 12" × ½" galvanised eye-bolts or other approved type of equivalent strength. Galvanised netting shall be no thinner than No. 18 standard wire gauge and not less than 54" wide with a mesh not larger than 1¼". Galvanised netting fasteners: of suitable size.</p> <p>(b) Erection Straining posts and intermediate posts or stobs shall be erected and spaced as specified in requirement (b) for operation 68, save that straining posts shall be sunk not less than 2' 6". The height of the fence from the ground shall be not less than 4' 6" to the top wire. Two line wires, plain or barbed, shall be strained and attached to posts as specified in requirement (b) for operation 68. One line wire shall be set on a level with the top of the netting and the other 6" above it. The netting shall either be buried to a depth of not less than 6" or lapped horizontally on the ground towards rabbit attack and kept down by earth sods spaced not more than 18" apart, and fastened to the supporting line wire with tie wire or fasteners or by twisting the top mesh round it. Gates in the fence line must be proofed.</p>	<p style="text-align: right;">£ s. d.</p>
73. Dry stone wall.	The wall shall be built to a height of not less than 4' 6" and shall be in accordance with the best standard and design of the district.	<p>Per yard run     ...     ...     ...     ...     16 0</p>
74. Quickthorn hedge (excluding fences).	The plants, not less than 1' 6" high, shall be set in a prepared bed, with not less than eight plants to the yard, staggered, in a double row, or four plants to the yard in a single row; the rows shall be 6" apart and the plants 9"	<p>Per yard run</p> <p>(a) with double row of plants     ...     ...     ...     4 8</p> <p>(b) with single row of plants     ...     ...     ...     2 9</p>

apart in rows. They shall be effectively fenced against farm stock and also against rabbits and hares unless there are no rabbits or hares in the neighbourhood.

**SHELTER BELT AND SHELTER HEDGE**

75. Shelter belt (excluding fences).	<p>Except where otherwise approved, the shelter belt shall be established as follows:—All rough vegetation shall be cleared and burnt. The area shall be well drained, adequately fertilised and effectively fenced against farm stock and also against rabbits and hares unless there are no rabbits or hares in the neighbourhood. The plants shall be transplants of approved species not less than 9" and not more than 1' 3" high; the roots shall not be allowed to become dry or exposed to the air before or at the time of planting and the plants shall be stored in soil. The rate of planting shall be not less than 1,750 plants per acre.</p>	Per quarter of an acre ... .. 11 2 6																								
76. Shelter hedge (excluding fences).	<p>The hedge shall be of not more than three rows. Plants shall be any of the species named below and shall be set in a prepared bed in accordance with the following table:—</p> <table border="1" data-bbox="467 637 996 878"> <thead> <tr> <th>Species</th> <th>Minimum Height</th> <th>Maximum spacing in and between rows</th> </tr> </thead> <tbody> <tr> <td>Hornbeam, Beech ... ..</td> <td>1' 0"</td> <td>1' 6"</td> </tr> <tr> <td>Larch, Scots Pine ... ..</td> <td>1' 0"</td> <td>5' 0"</td> </tr> <tr> <td>Poplar ... ..</td> <td>2' 0"</td> <td>5' 0"</td> </tr> <tr> <td>Cotoneaster, Lawson's Cypress ... ..</td> <td>1' 0"</td> <td>1' 6"</td> </tr> <tr> <td>Privet ... ..</td> <td>1' 0"</td> <td>9"</td> </tr> <tr> <td>Escallonia, Pittosporum ... ..</td> <td>1' 0"</td> <td>2' 0"</td> </tr> <tr> <td>Cupressocyparis leylandii... ..</td> <td>1' 0"</td> <td>3' 0"</td> </tr> </tbody> </table> <p>Where more than one row is planted, the plants shall be staggered. The plants shall be effectively fenced against farm stock and also against rabbits and hares unless there are no rabbits or hares in the neighbourhood.</p>	Species	Minimum Height	Maximum spacing in and between rows	Hornbeam, Beech ... ..	1' 0"	1' 6"	Larch, Scots Pine ... ..	1' 0"	5' 0"	Poplar ... ..	2' 0"	5' 0"	Cotoneaster, Lawson's Cypress ... ..	1' 0"	1' 6"	Privet ... ..	1' 0"	9"	Escallonia, Pittosporum ... ..	1' 0"	2' 0"	Cupressocyparis leylandii... ..	1' 0"	3' 0"	<p>Per yard of row ... .. 2 0          Per yard of row ... .. 1 9          Per yard of row ... .. 1 9            Per yard of row ... .. 3 0          Per yard of row ... .. 2 9          Per yard of row ... .. 4 6          Per yard of row ... .. 4 6</p>
Species	Minimum Height	Maximum spacing in and between rows																								
Hornbeam, Beech ... ..	1' 0"	1' 6"																								
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Cotoneaster, Lawson's Cypress ... ..	1' 0"	1' 6"																								
Privet ... ..	1' 0"	9"																								
Escallonia, Pittosporum ... ..	1' 0"	2' 0"																								
Cupressocyparis leylandii... ..	1' 0"	3' 0"																								

Operation	Requirements	Rate
Column 1	Column 2	Column 3
£ s. d.		
<b>GATES AND GATE-POSTS</b>		
77. Gate.	<p>(a) The gate shall be soundly constructed of wood or steel, complete with fittings for hanging and latching, and shall be hung in a workmanlike fashion to swing and latch easily.</p> <p>(b) A steel gate which is not metal-coated shall receive one coat of an approved priming paint and one other coat of a suitable paint, or two coats of bituminous paint.</p>	<p>Per foot of width</p> <p>(a) of wood ... .. 12 3</p> <p>(b) of metal-coated steel with tubular outer frame</p> <p>(i) gate 12' 0" wide or less ... .. 17 9</p> <p>(ii) gate more than 12' 0" wide ... .. 1 1 2</p> <p>(c) of painted steel with tubular outer frame</p> <p>(i) gate 12' 0" wide or less ... .. 10 10</p> <p>(ii) gate more than 12' 0" wide ... .. 12 9</p> <p>(d) with outer frame of angle steel</p> <p>(i) gate 12' 0" wide or less ... .. 10 10</p> <p>(ii) gate more than 12' 0" wide ... .. 12 9</p>
78. Gate-post.	<p>(a) The post shall be of wood, reinforced concrete, rolled steel beam or tubular steel.</p> <p>(b) A wooden post, if round, shall have a diameter of not less than 8" at the top or, if sawn, shall measure not less than 7" x 7".</p> <p>(c) A post of reinforced concrete shall measure not less than 7" x 7".</p> <p>(d) A rolled steel beam shall measure not less than 5" x 3".</p> <p>(e) A tubular steel post shall have an outside diameter of not less than 3½" and be of steel not less thick than No. 8 standard wire gauge except when used for hanging a gate more than 10' 0" wide when it shall have an outside diameter of not less than 4½" and be of steel not less than No. 7 standard wire gauge.</p> <p>(f) Wooden and reinforced concrete posts shall be sunk not less than 3' 6" in the ground or 3' 0" when embedded in concrete. Steel posts shall be sunk not less than 2' 6" in the ground and embedded in concrete. Concrete beds for all posts shall be not less than 1' 6" x 1' 6" x 2' 0" deep.</p>	<p>Per post ... .. 2 7 0</p>

**GRUBBING ORCHARDS**

79. Grubbing or clearing orchards.	All trees and bushes shall be removed, their disposal satisfactorily effected and the land brought to a state in which the first ploughing can be satisfactorily carried out.	Per tree (up to a maximum of 500 trees per acre or proportionate equivalent)	£ s. d.
		(a) with a trunk girth of not less than 10" but less than 15" ... ..	2 0
		(b) with a trunk girth of not less than 15" but less than 25" ... ..	5 9
		(c) with a trunk girth of not less than 25" but less than 35" ... ..	10 6
		(d) with a trunk girth of not less than 35" but less than 45" ... ..	16 0
		(e) with a trunk girth of not less than 45" but less than 57" ... ..	1 1 0
		(f) with a trunk girth of not less than 57" ... ..	1 9 6

## PART II

## 1.—(1) Where—

(a) professional advice or assistance is obtained by the applicant for the grant in connection with the carrying out of any operation specified in column 1 of the following Table or of any operation which is ancillary to the carrying out of the first mentioned operation, and

(b) the proportion which any charges incurred in respect of any such advice or assistance, or, if the appropriate Minister considers such charges excessive, such part of them as having regard to all the circumstances he approves as having been reasonably incurred, bears to the total cost of the operation, and of the ancillary operation, if any, calculated in accordance with the other provisions of these regulations, is not less than the percentage specified in respect of the operation in column 2 of the said Table,

the total cost calculated as aforesaid may be increased by such specified percentage.

## (2) Where—

(a) the applicant for grant carries out any operation specified in column 1 of the following Table, the cost of which is not to be calculated in accordance with these regulations, and obtains professional advice or assistance in connection with the carrying out of any other operation ancillary to the carrying out of the first mentioned operation and the cost of that ancillary operation is to be calculated in accordance with these regulations, and

(b) the proportion which any charges incurred in respect of any such advice or assistance, or, if the appropriate Minister considers such charges excessive, such part of them as having regard to all the circumstances he approves as having been reasonably incurred, bears to the cost of that ancillary operation, calculated in accordance with the other provisions of these regulations, is not less than the percentage specified in column 2 of the said Table in respect of the first mentioned operation,

the cost of that ancillary operation calculated as aforesaid may be increased by such specified percentage.

TABLE

Column 1	Column 2
Operation	Percentage
Totally enclosed general purpose building of traditional or framed construction (if not prefabricated), open-fronted building of traditional construction, store, mushroom house (conventional design), rhubarb shed (conventional design), wall insulation of mushroom house or rhubarb shed of conventional design, insulation of mushroom house or rhubarb shed with curved or cranked roof sheeting, suspended floor, insulation of wall, floor and ceiling of temperature controlled storage. . . . .	7½
Prefabricated totally enclosed general purpose building of framed construction, concrete road, soil cement road, new road made with broken stone or ungraded materials, improving existing road with broken stone or ungraded materials, sludge tank, cover for sludge tank or shelter belt. . . . .	5
Dutch barn type of building or open-sided shed, of framed construction in either case, mushroom house or rhubarb shed with curved or cranked roof sheeting. . . . .	2½

2. If, for the carrying out of operation 1, 2, 3, 5, 6, 7 or 8 the erection of any wall is unnecessary by reason of the building being constructed as a lean-to, or as part of or adjacent to any other construction, the cost of the operation calculated in accordance with the other provisions of these regulations shall be reduced by 46s. 10d. in respect of every square yard of wall so rendered unnecessary.

For the purposes of this paragraph, the extent of any walling rendered unnecessary shall be calculated by multiplying its length by a figure made up of its height (from ground level to the eaves or, in the case of a gable end, to the point midway between the level of the eaves and the highest point of the roof) plus 2' 0" for depth of foundations.

## SCHEDULE 2

### GENERAL SPECIFICATIONS

#### *All materials used in any part of an operation*

1. All materials used in any part of an operation shall be of good quality and in a suitable condition: and no such materials shall have been previously used, except any of the following materials used in accordance with these regulations, namely—

- (a) approved railway sleepers, in the carrying out of operation 13, 14 or 15;
- (b) brick, stone, ungraded materials or other approved material, in the carrying out of operation 27, 32, 54, 65, 66 or 73; and
- (c) approved materials from any dismantled glasshouse, in the carrying out of operation 11, 12, 13, 14, 16, 17, 18 or 19.

There may be used in substitution for any material specified in these regulations any other material approved as being equally effective for its purpose, being material which has not been previously used.

#### *Buildings of traditional construction*

2. As respects buildings of traditional construction—

- (a) Foundations shall be constructed of concrete, reinforced where necessary.
- (b) Walls shall be constructed in accordance with the requirements for operation 28, 29, 30 or 32, as may be appropriate.
- (c) Load-bearing walls shall be at least 6" thick (9" if of brick), constructed where necessary with piers of brick, stone, concrete blocks or concrete at suitable intervals.
- (d) Where roof trusses are used they shall rest on piers of brick, concrete or stone bonded into the walls and having a sectional area of not less than  $9" \times 13\frac{1}{4}"$  exclusive of the wall.
- (e) Except where otherwise approved all walls constructed of brick, stone, concrete blocks or hollow clay blocks shall have a damp-proof course of an approved type. In the case of a glasshouse a conventional damp-proof course shall not be necessary, but a suitable horizontal layer of felt or other approved material shall be inserted to prevent contact between any timber and the brick or blockwork upon which it may rest.
- (f) Roof members of approved dimensions shall be constructed of steel, wood, concrete or other approved material.
- (g) Roof covering shall be of tile, slate, cedar shingles, galvanised steel, asbestos cement, aluminium, aluminium alloy or other approved roof material.
- (h) Floors shall be designed in accordance with the needs of the building and shall be constructed of chalk, rammed earth, hardcore, concrete or other approved material. The thickness of concrete shall be not less than 4" except that in glass-houses concrete used for the floors of borders or for footpaths shall be not less than 3" thick.
- (j) Adequate gutters, downpipes, gullies and drains shall be provided to convey rain-water from roofs to soakaways or other places of disposal.

- (k) All structural or other steelwork, unless galvanised, shall be painted with two coats of bituminous or other approved paint; the first coat to be applied before erection and the second during or after erection but before any sheeting is fixed. Alternatively, both coats may be applied before delivery in which case the two coats (if not of bituminous paint) shall be of different colours; damaged paintwork shall be touched up on site.
- (l) Adequate means of ventilation shall be provided where necessary.

#### *Buildings of framed construction*

3. As respects building of framed construction—

- (a) The building shall be constructed in accordance with the requirements of British Standard 2053:1965.
- (b) The framework shall be constructed of steel, wood, concrete or aluminium alloy or of a combination of any of these materials and shall be of the portal or the curved, triangulated or mono-pitch truss type; if curved or triangulated or mono-pitch trusses are used, the uprights supporting the trusses shall be either stanchions or posts of any of the aforementioned materials or pillars or piers of masonry, brick or reinforced concrete.
- (c) Infilling walls for totally enclosed general purpose buildings shall be constructed in accordance with the requirements for any of operations 28 to 32 inclusive, as may be appropriate.
- (d) Cladding shall be constructed in accordance with the requirements for operation 33.
- (e) Foundations for stanchions shall be constructed in accordance with the requirements for any of operations 23, 24 or 25, as may be appropriate.
- (f) Sub-paragraphs (e), (f), (g), (h), (j), (k) and (l) of paragraph 2 of this Schedule shall apply to buildings of framed construction as they apply to buildings of traditional construction.

#### *Galvanised steel*

4. Where galvanised steel is used, the gauge shall be not less than 18 for guttering; not less than 20 for rain-water downpipes and fittings; not less than 22 for roof coverings; and not less than 24 for wall coverings.

#### *Aluminium and aluminium alloy sheeting*

5. Corrugated aluminium and corrugated aluminium alloy sheeting shall be not less than 24 gauge thick when used for roofing and wall cladding and shall comply with British Standard 2855:1957 (amended 1962). Troughed aluminium alloy sheeting shall comply with British Standard 3428:1961. The galvanised steel in glasshouses shall be insulated from aluminium or aluminium alloy to prevent corrosion due to galvanic action.

#### *Asbestos cement*

6. Asbestos cement used for roof or wall sheeting shall be at least  $\frac{1}{4}$ " thick.

#### *Mortar*

7. Mortar shall be made of a mix of 1 part cement, 2 parts hydrated lime and 9 parts sand, the parts to be by volume; except—

- (a) in the case of brickwork or hollow clay block walling, when it shall be either of that mix or of a mix of 1 part cement and 3 parts sand, or of any other approved mix;
- (b) in the case of concrete block walling in an exposed situation, when it shall be of a mix of 1 part cement, 1 part hydrated lime and 6 parts sand, or of any other approved mix;
- (c) in the case of rendering, when it shall be either of that mix or of any other approved mix.



**Concrete**

8. Concrete shall be made of a mix of 1 part cement, 2 parts sand and 4 parts broken stone or gravel; or 1 part cement and 5 parts all-in ballast as specified in British Standard 882:1954 (amended 1956 and 1957) the parts to be by volume in each case. The aggregates shall be suitably graded.

**Wood**

9. Unless otherwise approved all—

- (a) round or half-round wood,
- (b) cleft or sawn wood, except that from the heartwood of oak, larch, sweet chestnut, yew or western red cedar,
- (c) plywood, except that consisting wholly of one or more approved durable species of wood, .

shall be preserved with creosote or other approved preservative if it is—

- (i) in contact with the ground or manure; or
- (ii) exposed to the weather and unpainted; or
- (iii) enclosed in brickwork, masonry or concrete; or
- (iv) liable to remain damp for long periods; or
- (v) inadequately ventilated;

save that near live plants an approved waterborne mixture shall be used instead of creosote.

For the purposes of this paragraph, the method of preservation shall, unless otherwise approved, be impregnation under pressure or by hot and cold treatment in an open tank.

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**EXPLANATORY NOTE**

*(This Note is not part of the regulations.)*

These regulations supersede the Horticultural Improvements (Standard Costs) Regulations 1963, as amended, in relation to operations included in proposals which are approved on or after 1st August 1966.

In general the standard costs have been increased: the other changes from the 1963 regulations relate only to matters of detail.