

# LOW COST HOUSING



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DEPARTMENT OF NORTHERN AFFAIRS & NATIONAL RESOURCES  
NORTHERN ADMINISTRATION BRANCH  
ENGINEERING DIVISION



# **LOW COST HOUSING**

## **A GUIDE TO NORTHERN HOUSING FOR ESKIMOS**



**NORTHERN ADMINISTRATION BRANCH**

**Issued under the authority of the  
Minister of Northern Affairs and National Resources  
Ottawa, Canada**

**1965**

## LOW-COST HOUSING

There are many housing plans operating in the north.

There are plans administered by the Central Mortgage and Housing Corporation available throughout the country. In the Yukon and Northwest Territories there are plans for housing of somewhat lower standard than normal CMHC designs. There are plans for Indian housing which are generally of a cost well below the houses covered by CMHC and the schemes of the territorial governments. Then there is a program for Eskimo low-cost housing which is designed to meet the most basic needs of shelter, principally for those who have lived until now in conditions unacceptable to fundamental human needs.

The Central Mortgage and Housing Corporation, the territorial governments, and the Department of Citizenship and Immigration all have literature describing the terms under which those eligible may obtain these various types of housing. The purpose of this present pamphlet is to outline the program for low-cost housing designed and administered by the Northern Administration Branch of the Department of Northern Affairs and National Resources to supplement these other schemes and to fill the gaps which they may have left.

The program for low-cost housing in the north is relatively new and it is designed to meet unusual circumstances for which no previous experience in Canada provides a pattern. There are obvious problems in designing to fit the climate and customs of the people. There are special problems of heating. The program must operate against a background of considerable economic distress. Therefore it must be clearly recognized that every aspect of the program is subject to change. The designs of the houses may be altered from year to year to incorporate the experience of the users. As well, the financial and administrative framework of the schemes are under constant development. This booklet, therefore, can do no more than provide a picture of the low-cost housing program as it exists at this time. It is subject to change with little notice.

To understand both the philosophy and the working of the present program, it is helpful to look at the background and see how its purposes evolve. This is a program designed for people of limited means. It is not concerned with housing of an average Canadian standard. It could be represented as a stepping-stone from intolerable living conditions in tents, snow houses or ill-built huts on the one hand, and the comfortable homes to which Canadians generally aspire, on the other. The program must be highly subsidized to meet an urgent physical need.

For those familiar with Arctic conditions there may be little point in elaborating on that physical need. For others, it may be enough to point out that the death rate of Eskimo children of ages from one to four is thirteen times the Canadian rate. The average age at death for Eskimos is fifteen years compared to seventy years for the average Canadian. Five out of two hundred Eskimos still develop tuberculosis each year. All these medical problems are directly related to housing. The Canadian Eskimo has had a continuing crisis in housing which is comparable to that in many under-developed countries in the world.

This is not a newly-born crisis. In the days of a completely natural economy — before the white man came — Eskimos had the equipment for a compromise with nature. In some ways, the traditional housing was tolerable though, of course, it is difficult now to reckon its costs in terms of avoidable illness and death. Certainly thousands of Eskimos in recent years have died simply because no medical programs could cope with the diseases which flourished through their poor living conditions.

In the Northwest Territories, there is a health ordinance which prescribed the minimum space required to house a human being; this is in line with many provincial statutes. Only a handful of Eskimos — far less than one percent — live in housing which conforms to those minimum standards.

The limitations of the program are, in part, physical, financial, and social. The physical limitation is related to problems of climate and distance. The financial limitation is a matter of how much the country can afford to provide to subsidize the program each year. The social limitation, which involves the most difficult decisions, is the need to design a scheme which provides the necessary housing and associated services to an economically distressed people, without making them permanently and totally dependent upon the handouts of the government. For this reason, local participation must be an important factor in the program.

### **The Program Itself**

The program for housing itself is simple. Any Eskimo wishing to build a low-cost house of approved design may apply on a simple form (like the one attached at the back of the booklet) for government assistance. He may choose a design from this book or he may submit a different one. When the design is approved, the government will undertake to order and pay for the house and to contribute a subsidy of \$1,000. The government will collect the remainder owing from the Eskimo according to the terms that the new owner and the government agree upon.

If the applicant for a house has enough cash to pay his share, he simply pays the government for the full cost of the house and transportation, less the \$1,000 subsidy, when the government asks him to do so. This would normally be soon after delivery.

If the new owner does not have cash he may, when applying for the house, apply also for a loan under the Eskimo Loan Fund. If his loan application is approved, he will be able to make up his share by monthly payments to the nearest administrative office. He will be in the favoured position of paying only 5% interest on the money he has borrowed.

From the moment he accepts the house, the new owner is responsible for its upkeep and maintenance, as well as for its heating. He is also responsible for services such as the provision of water and the disposal of sewage. The arrangements for these services vary so much from community to community in the north that no attempt will be made to describe them here or to describe the financial obligations for services that an individual undertakes when he becomes the owner of a house. The local administrative officer will advise any Eskimo house-applicant on this when he makes application.

### **What Kind of Design**

An applicant for low-cost housing is not restricted to the designs contained in this book. If his application for a government subsidy is to be approved, however, his design must conform to the requirements of the laws and regulations of the Northwest Territories. The Government, as the considerable investor in the housing, insists that no house for which it is partly responsible will be unhealthy, unsafe, or of such doubtful construction that it is a poor investment for householder and government alike.

The Administration, however, will always welcome new ideas for plans and indeed most of the plans in this booklet arose from discussions with northerners. If a house applicant submits a new plan, the engineers will discuss it with him to comment on any features of it with which other northern residents may have had good or bad experience in the past. They will check the designs against the requirements of the building code. An applicant submitting a design of his own, quite separate from those in the book, should bear in mind three points. First, the design should be as accurate as possible, not just a rough sketch. If the applicant has in mind only a rough plan, he should get local advice to put this plan into as exact a form as possible, though, of course, no one expects anything approaching the exactness of architects' drawings. Second, the applicant should bear in mind that the cost of an individually designed house may tend to be higher than the standard designs listed in this booklet.



By bulk buying, the Government can generally get better prices than an individual purchaser. All the savings are, of course, passed on to the householder. Third, the applicant who submits his own design will have to bear in mind that it will take considerably longer to approve his application so that time may be allowed for discussion with him and for checking the original plan or modifications against building regulations.

Across the north will be found many examples both of prefabricated housing and of houses of conventional design. The proponents of each hold strong convictions. Those who support housing of conventional design claim better workmanship, less risk from damage in transit, the possibility of more local labour content (including the householder's own) and ease of repair. Those who support prefabricated design point to large savings in initial cost from mass production methods, savings which often result in a prefabricated house costing little more than the materials for a conventional one. They point out that factory construction makes the local householder independent of skilled tradesmen for many aspects of erection. The advocates of prefabrication acknowledge the weaknesses in earlier northern prefabricated houses which were notorious for leakage and similar defects; they say that these shortcomings have been largely eliminated.

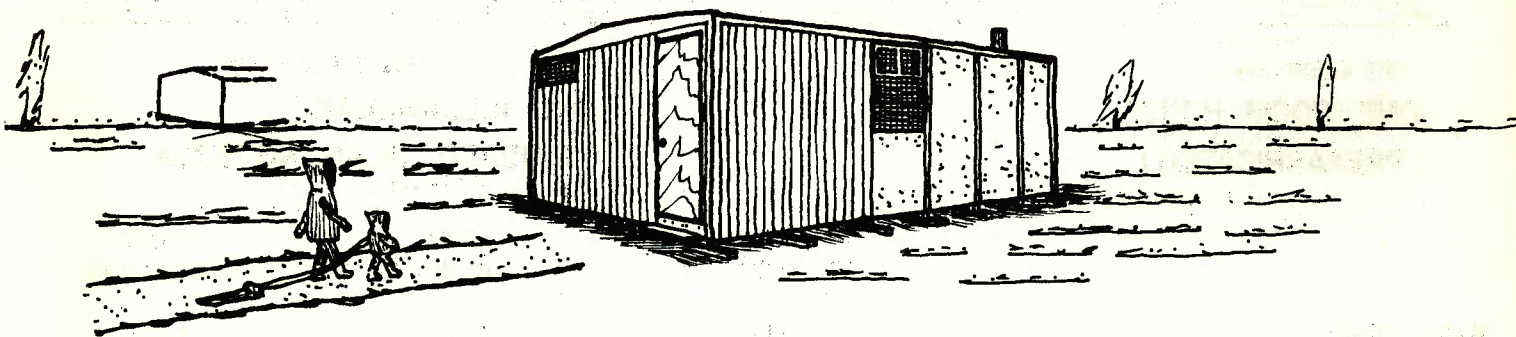
It must finally be the decision of any householder what kind of house he wants to buy, for he will pay for it and he will own it. In many cases, a design is available either in prefabricated or in prefabrication or in conventional form.

## Extras

Each house description includes information on the cost both of the basic house and of extras. Listed under extras are features from electrical materials to bathtubs. In most cases when the house is to be erected where there is electric power, the electrical materials will be considered a necessity by the future owner. The owner, however, should consider carefully before making a decision on the other extras. A full-sized bathtub, for example, may appear to cost little in relation to the whole house but the owner must bear in mind the problems of water supply as well as its heating. Often it will be more practical to get the smaller portable tub which will make bathing under local conditions easier and leave much more space within the house for storage or other purposes.

Extras beyond those which are listed in the booklet can certainly be ordered by the householder but they cannot form a part of the subsidy and credit plan. In other words, if the householder wishes to order any additional fittings or furniture, he must be prepared to pay cash on delivery. In many cases the administration would advise him to order these things direct, though naturally officers in the administration would be glad to give advice and help where needed.



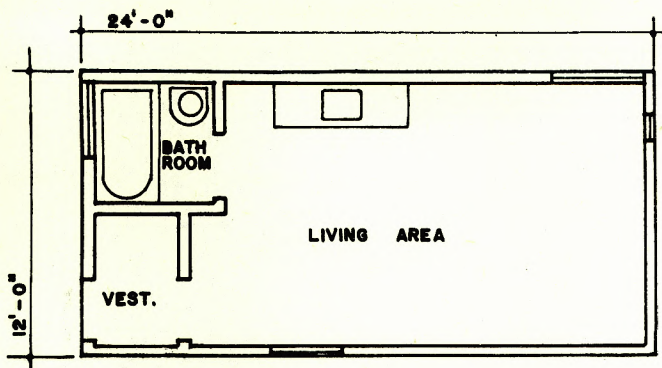


## "THE ILLUKALLAK"

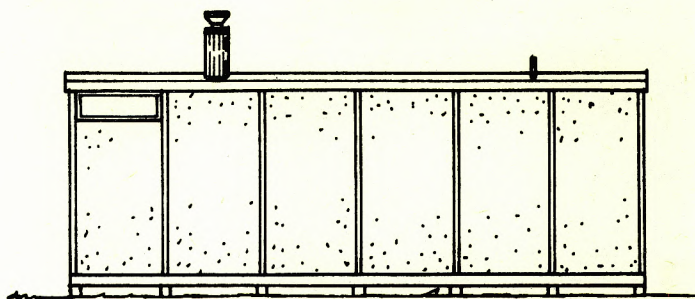
The Illukallak is a one-room house consisting of a vestibule, living area and a bathroom. The walls are fir plywood on studs, stained both inside and out. The floor is fir plywood laid on joists and covered by sheet linoleum. The roof is fir plywood laid on joists and protected by Neoprene Hypalon, a pliant plastic finish.

As a special feature, the house's exterior has one colored panel. The Illukallak is available in prefabrication construction (see page 6).

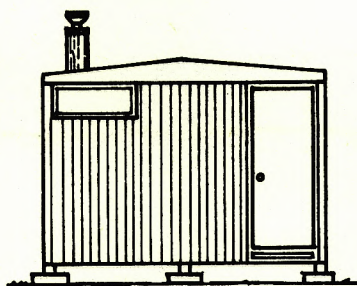




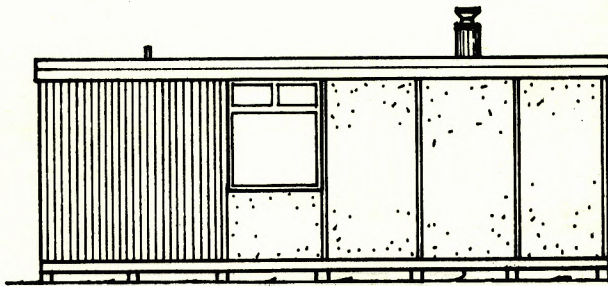
FLOOR PLAN



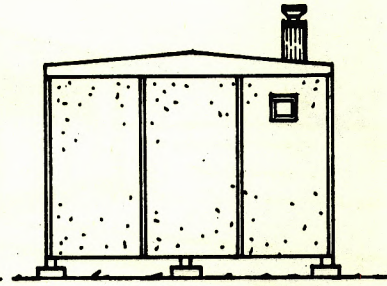
REAR ELEVATION



LEFT ELEVATION



FRONT ELEVATION



RIGHT ELEVATION

**ONE ROOM HOUSE  
( PREFABRICATED )**

**"THE ILLUKALLAK"**

**STANDARD PLAN NO. 370A**

SCALE: 1/8" = 1'-0"

	EST. WGT. LBS.	COST FOB MONT.	COST FOB W/WYS
<b>BASIC HOUSE</b>	7345	\$1350	\$1405
<b>*BASIC ELEC. MTLS.</b>	300	210	225
<b>BASIC MECH MTLS.</b>			
PLASTIC WATER TANK	30	40	50
SINK	5	20	25
OIL STOVE & CHIMNEY	200	150	160
CHEMICAL TOILET	20	30	35
<b>BASIC TOTALS</b>	<b>7900</b>	<b>1800</b>	<b>1900</b>

\*May be excluded at Purchasers' option

**ALTERNATIVES (REVISE BASIC FIGURES ACCORDINGLY)**

STEEL WATER TANK	320	140	150
WOOD/COAL STOVE & CHIMNEY	200	145	185
BATH TUB	100	65	70

**FREIGHT COSTS PER 100 LBS.**

**MONTREAL TO:**

CAPE DORSET	\$4.60
RESOLUTE BAY	7.60
WHALE COVE	3.85
BAKER LAKE	4.85
GRISE FIORD	7.60
FORT CHIMO	3.00

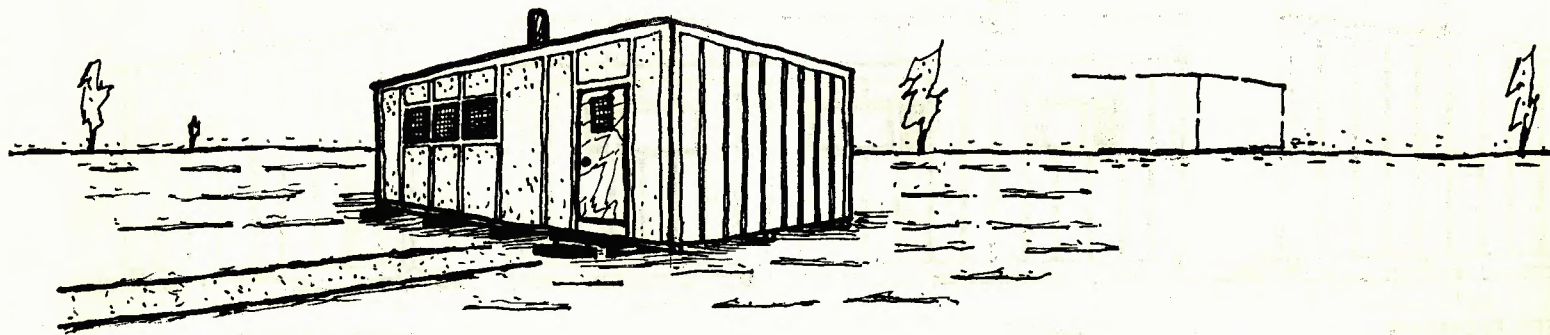
**WATERWAYS TO:**

INUVIK	\$4.52
TUKTOYAKTUK	4.52
SACHS HBR.	6.35
COPPERMINE	6.35
SPENCE BAY	8.40
AKLAVIK	4.52

NOTE: These figures are subject to change

February, 1965



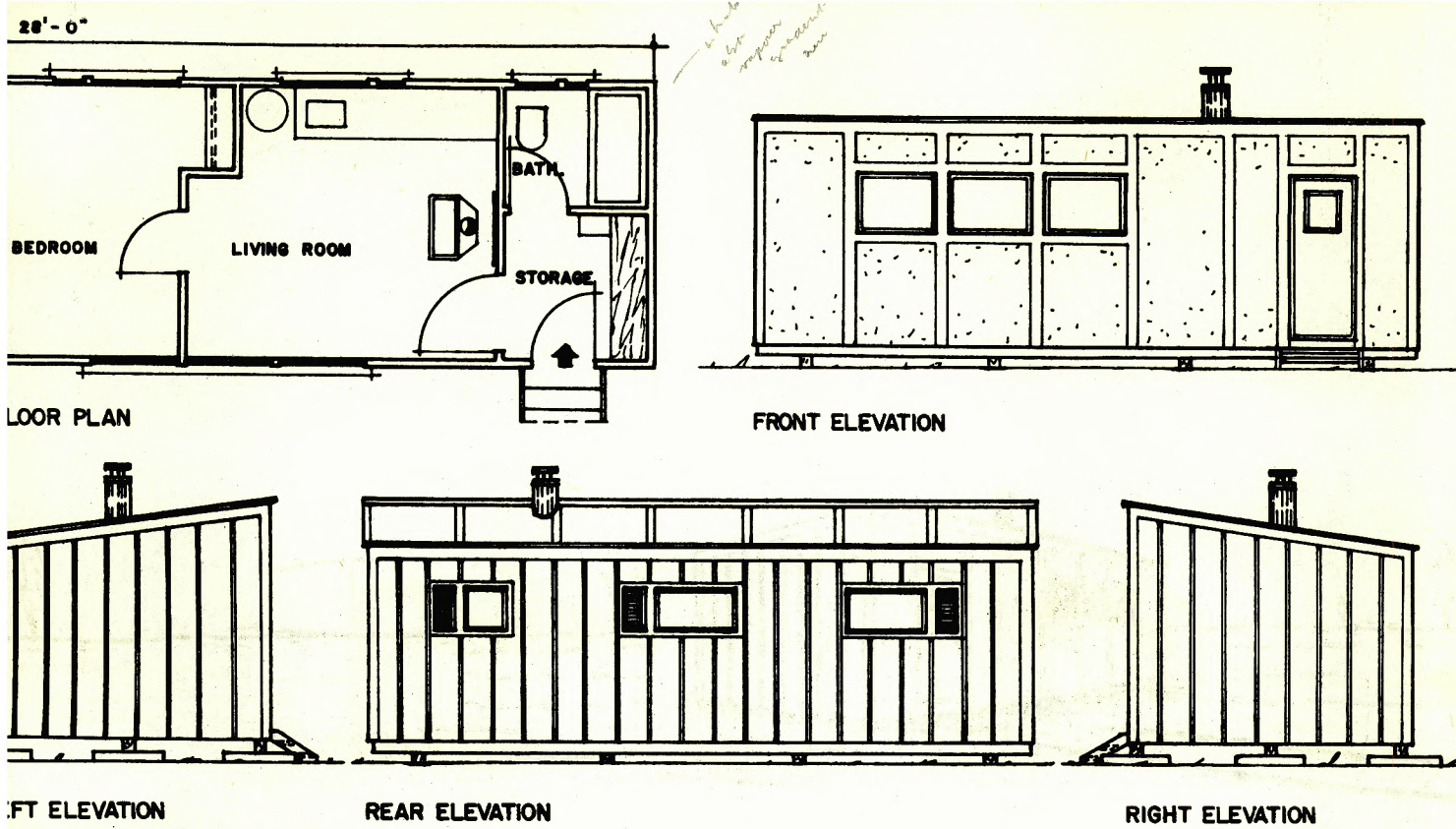


## **"THE TISI" (PREFABRICATED)**

The Tisi is a two-room house consisting of a living room, bedroom, bathroom and vestibule. The walls are fir plywood on studs, unfinished on the interior, stained on the exterior. The floor is fir plywood laid on joists and covered by sheet linoleum. The roof is fir plywood laid on joists and protected by Neoprene Hypalon, a pliant plastic finish.

The Tisi is available in both prefabricated construction (see page 8) and conventional construction (see page 20).





ONE BEDROOM HOUSE  
(REFABRICATED)

**"THE TISI"**  
**STANDARD PLAN NO: 395**  
SCALE: 1/8" = 1'-0"

	EST. WGT. LBS.	COST FOB MONT.	COST FOB W/WYS
BASIC HOUSE	9415	\$1990	\$2045
BASIC ELEC. MTLs.	260	270	285
BASIC MECH. MTLs.			
PLASTIC WATER TANK	30	40	50
SINK	5	20	25
OIL STOVE & CHIMNEY	270	150	160
CHEMICAL TOILET	20	30	35
<b>BASIC TOTALS</b>	<b>10,000</b>	<b>2,500</b>	<b>2,600</b>

May be excluded at Purchaser's option

ALTERNATIVES (REVISE BASIC FIGURES ACCORDINGLY)			
STEEL WATER TANK	320	140	150
WOOD/COAL STOVE & CHIMNEY	200	145	155
BATH TUB	100	65	70

WEIGHT COSTS PER 100 LBS.  
MONTREAL TO:

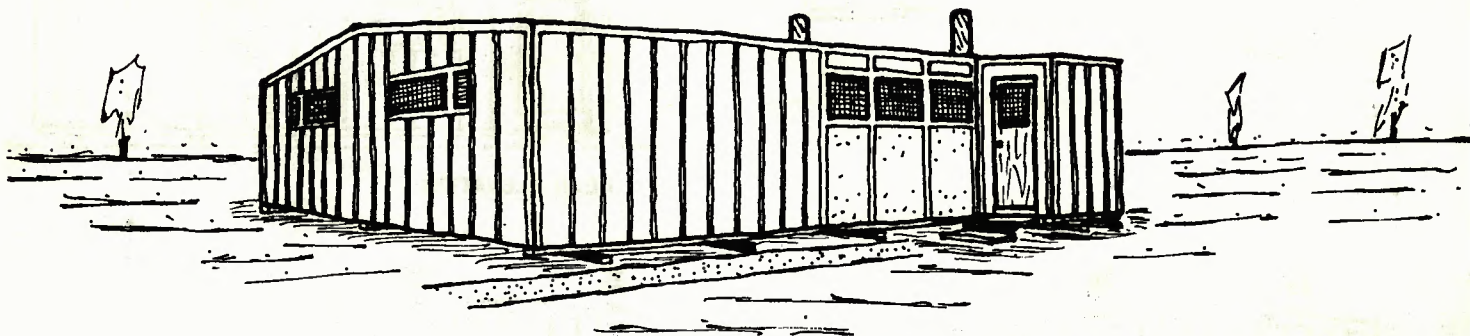
CAPE DORSET	\$4.60
RESOLUTE BAY	7.60
WHALE COVE	3.85
BAKER LAKE	4.85
GRISE FIORD	7.60
FORT CHIMO	3.10

WATERWAYS TO:

INUVIK	\$4.52
TUKTOYAKTUK	4.52
SACHS HBR.	6.35
COPPERMINE	6.35
SPENCE BAY	8.40
AKLAVIK	4.52

NOTE: These figures are subject to change



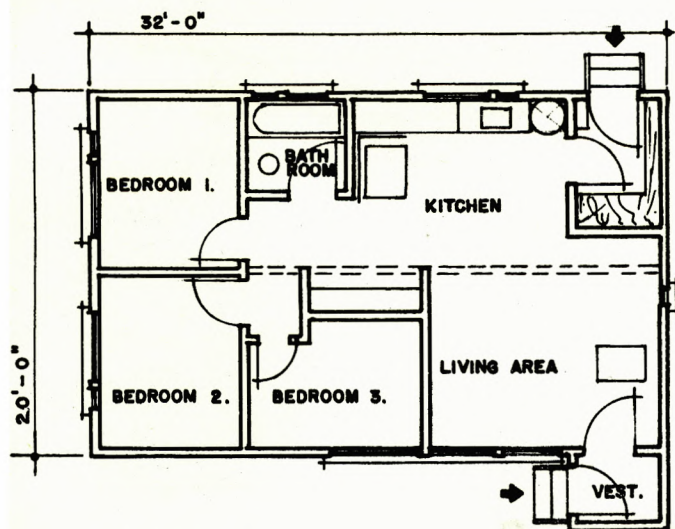


**"THE PULAARVIK"  
(PREFABRICATED)**

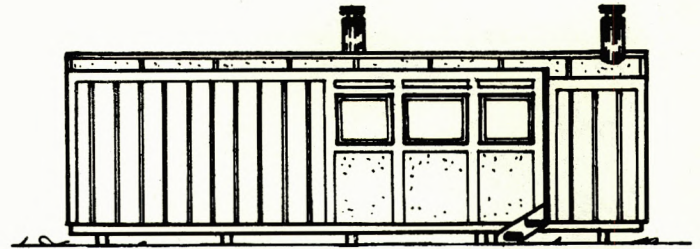
The Pulaarvik - log construction - is a 5-room house consisting of a living area, kitchen, three bedrooms and a bath. The entrance is through either a lobby which can be used for storage or through a vestibule.

The floor is fir plywood laid on joists and finished with sheet linoleum. The walls are of log with 2 x 2 battens and 2-inch insulation lining, stained on the exterior surface, bare on the interior. The roof is fir plywood laid on joists and protected by a Neoprene Hypelon, a pliant plastic finish.

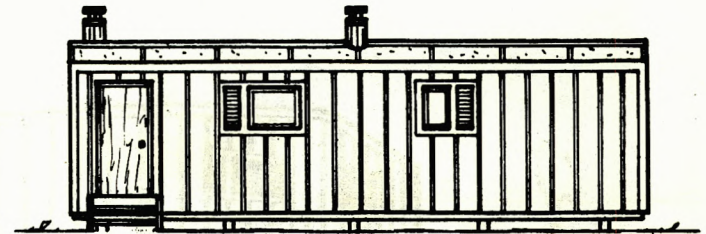
For description of log construction Pulaarvik see page 26.



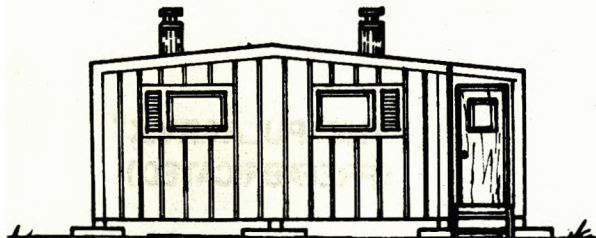
FLOOR PLAN



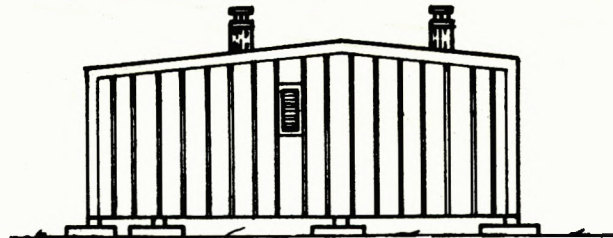
FRONT ELEVATION



REAR ELEVATION



LEFT ELEVATION



RIGHT ELEVATION

**THREE BEDROOM HOUSE  
(PREFABRICATED)**

**"PULAARVIK"  
STANDARD PLAN NO: 396  
SCALE: 3/32" = 1'-0"**

**BASIC HOUSE**

**\*BASIC ELEC. MTLs.**

**BASIC MECH. MTLs.**

PLASTIC WATER TANK

SINK

OIL STOVE & CHIMNEY

CHEMICAL TOILET

OIL SPACE HEATER & CHIMNEY

**BASIC TOTALS**

\*May be excluded at Purchaser's option

**ALTERNATIVES (REVISE BASIC FIGURES ACCORDINGLY)**

STEEL WATER TANK

WOOD/COAL STOVE & CHIMNEY

WOOD/COAL SPACE HEATER & CHIMNEY

BATH TUB

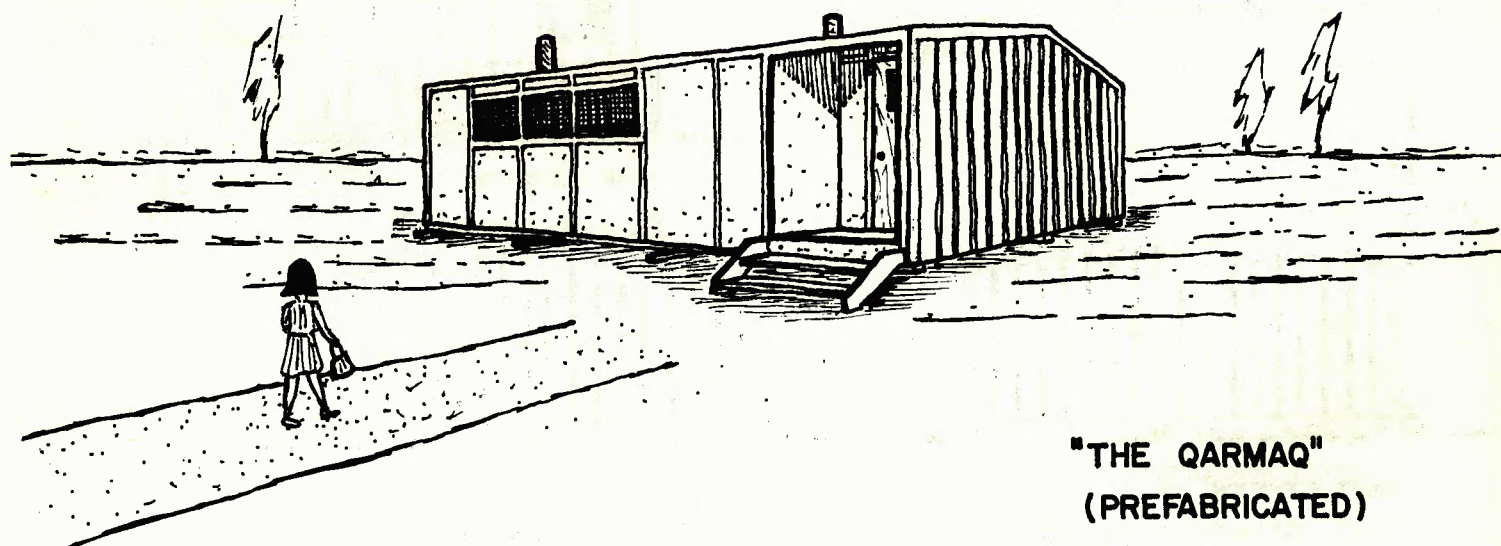
**FREIGHT COSTS PER 100 LBS.**

MONTREAL TO: CAPE DORSET	\$4.60
RESOLUTE BAY	7.60
WHALE COVE	3.85
BAKER LAKE	4.85

EST. WGT. LBS.	COST FOB MONT.	COST FOB W/WYS
18,385	\$4,165	\$4,275
310	270	285
30	40	50
5	20	25
270	150	160
20	30	35
180	160	170
19,200	4,835	5,000

WATERWAYS TO: INUVIK	\$4.52
TUKTOYAKTUK	4.52
SACHS HBR.	6.35
COPPERMINE	6.35





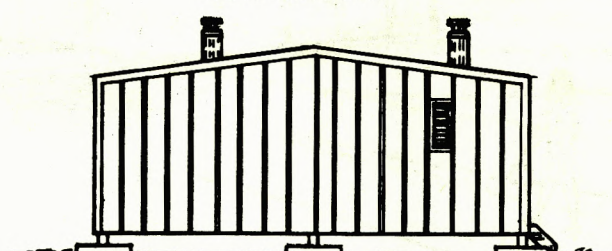
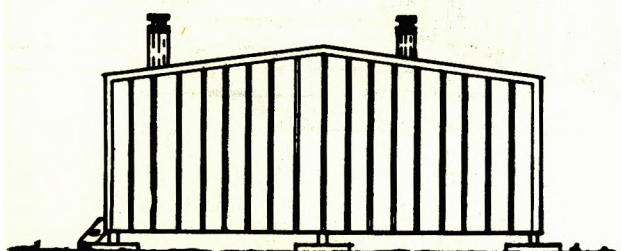
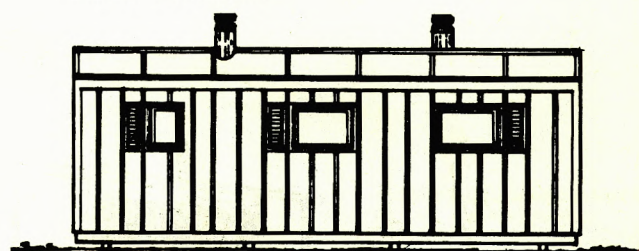
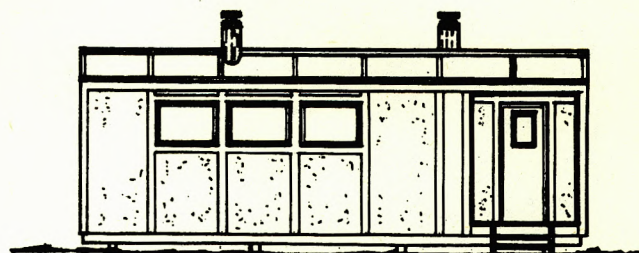
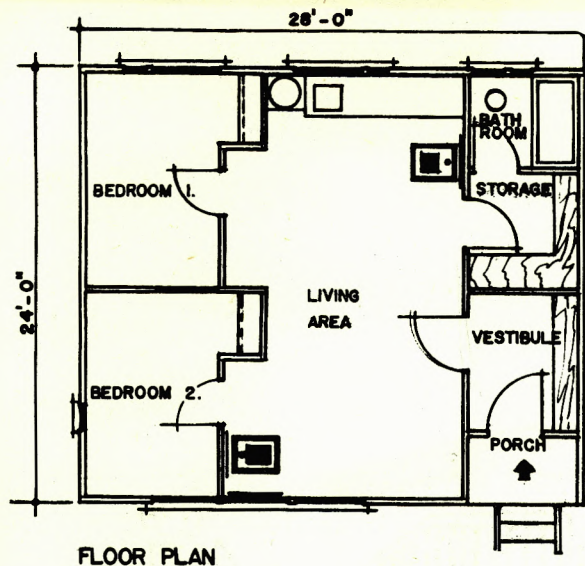
### **"THE QARMAQ" (PREFABRICATED)**

The Qarmaq is a three-room house, consisting of a living area, two bedrooms, a vestibule, a storage room and a bathroom.

The floor is fir plywood laid on joists and covered by sheet linoleum. The walls are fir plywood on studs, unfinished on the interior and stained on the exterior. The roof is fir plywood laid on joists and protected by Neoprene Hypalon, a pliant plastic finish.

The Qarmaq has a protected entrance, provided by a porch outside the vestibule.

The Qarmaq is available in prefabricated construction (see page 12) or conventional construction (see page 18).



**TWO BEDROOM HOUSE  
(PREFABRICATED)**

**"THE QARMAQ"  
STANDARD PLAN NO. 397  
SCALE: 3/32" = 1' - 0"**

**BASIC HOUSE**  
**\* BASIC ELEC. MTLs.**  
**BASIC MECH. MTLs.**  
 PLASTIC WATER TANK  
 SINK  
 OIL STOVE & CHIMNEY  
 CHEMICAL TOILET  
 OIL SPACE HEATER & CHIMNEY

EST. WGT. LBS.	COST FOB MONT.	COST FOB W/WYS
19,230	\$4,300	\$4,430
265	300	320
30	40	50
5	20	25
270	150	160
20	30	35
180	160	180
<b>BASIC TOTALS</b>	<b>5,000</b>	<b>5,200</b>

\* May be excluded at Purchaser's option

**ALTERNATIVES (REVISE BASIC FIGURES ACCORDINGLY)**

STEEL WATER TANK	320	140	150
WOOD/COAL STOVE & CHIMNEY	200	145	155
WOOD/COAL SPACE HEATER & CHIMNEY	260	180	190
BATH TUB	100	65	70

**FREIGHT COSTS PER 100 LBS.**

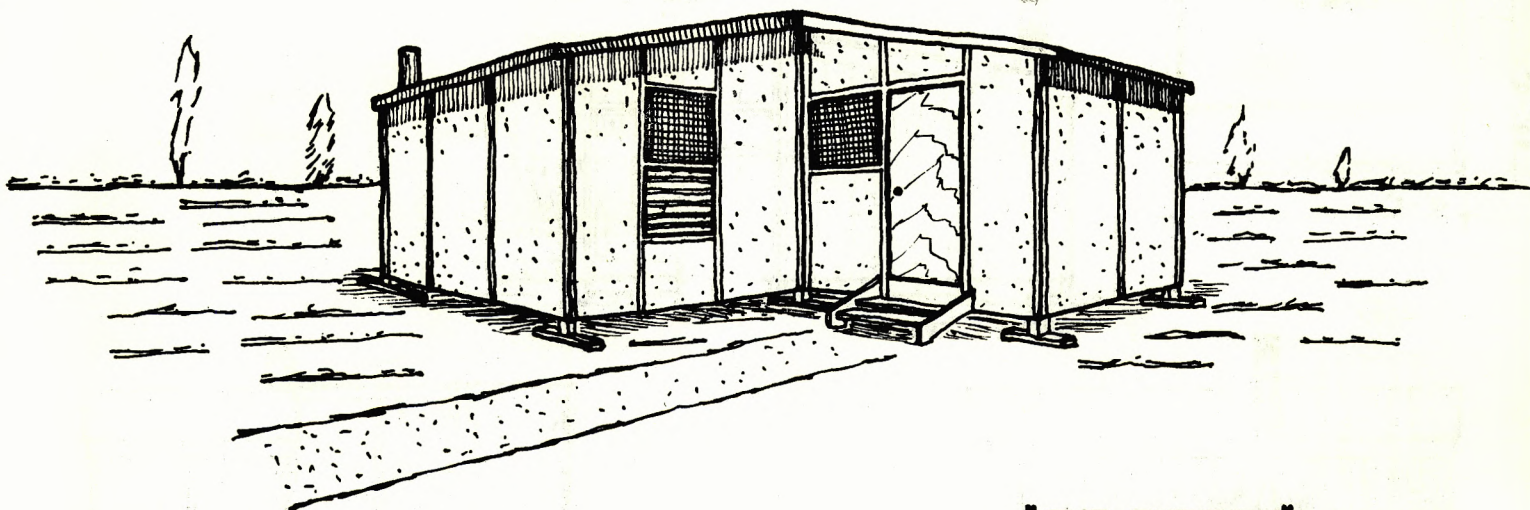
MONTREAL TO: CAPE DORSET	\$4.60
RESOLUTE BAY	7.60
WHALE COVE	3.85
BAKER LAKE	4.85
GRISE FIORD	7.60
FORT CHIMO	3.10

WATERWAYS TO: INUVIK	\$4.52
TUKTOYAKTUK	4.52
SACHS HBR.	6.35
COPPERMINE	6.35
SPENCE BAY	8.40
AKLAVIK	4.52

NOTE: These figures are subject to change

February, 1965

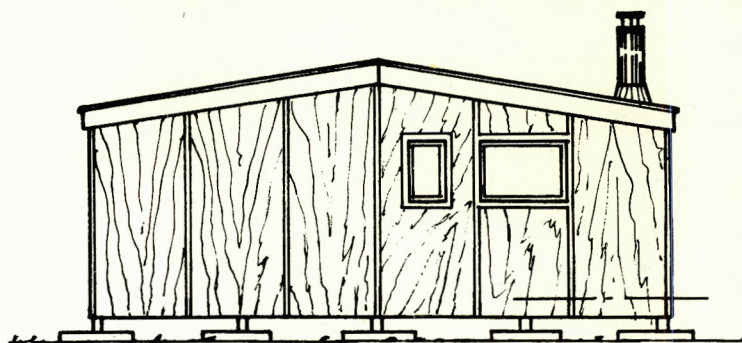
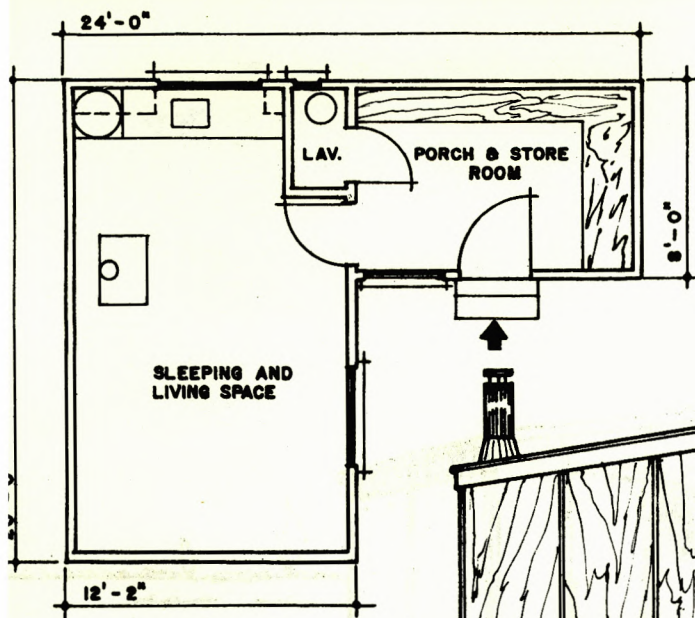




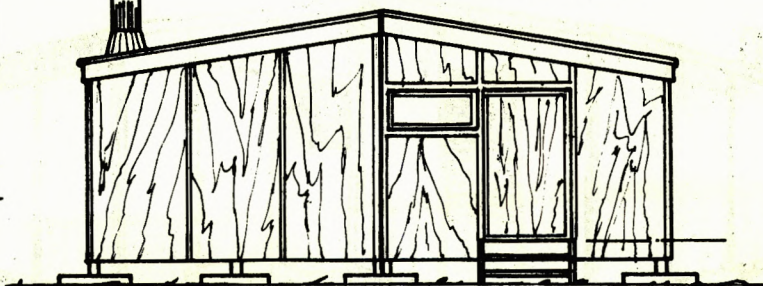
**"THE TURSUK"**

The Tursuuk is an L-shaped house consisting of a large, enclosed porch-storeroom, a lavatory and a sleeping-living area. The floor is fir plywood laid on joists and covered by sheet linoleum. The walls are fir plywood on studs, unfinished on the exterior. The roof is fir plywood laid on joists and protected by Neoprene Hypalon, a pliant plastic finish.

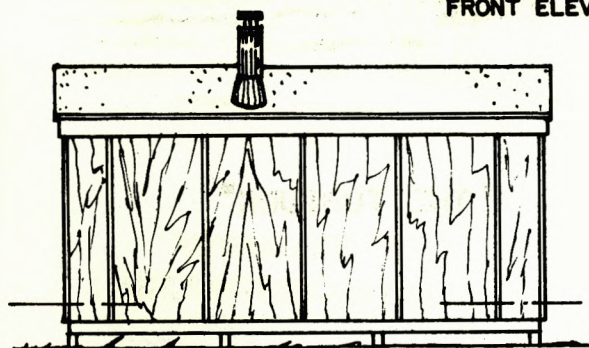
The Tursuuk is available in prefabricated construction (see page 30) or conventional construction (see page 14).



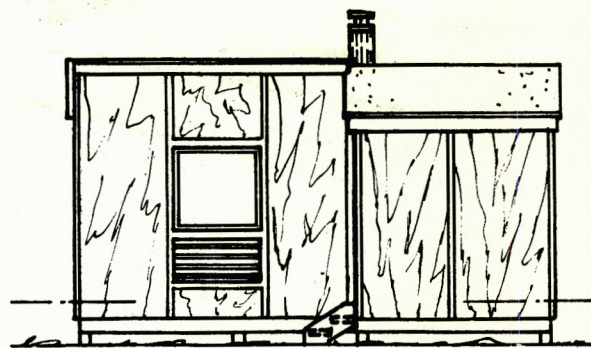
REAR ELEVATION



FRONT ELEVATION



LEFT ELEVATION  
ONE ROOM & PORCH  
(STD. CONSTRUCTION)



RIGHT ELEVATION  
"TURSUUK"  
STANDARD PLAN NO. 408  
SCALE: 1/8" = 1'-0"

	EST. WGT. LBS.	COST FOB MONT.	COST FOB W/WYS
<b>BASIC HOUSE</b>	11,375	\$1,490	\$1,580
* <b>BASIC ELEC. MTLs.</b>	300	170	185
<b>BASIC MECH. MTLs.</b>			
PLASTIC WATER TANK	30	40	45
SINK	5	20	20
OIL STOVE & CHIMNEY	270	150	155
CHEMICAL TOILET	20	30	35
<b>BASIC TOTALS</b>	12,000	1,900	2,020

\* May be excluded at Purchaser's option

**ALTERNATIVES (REVISE BASIC FIGURES ACCORDINGLY)**

STEEL WATER TANK	320	140	150
WOOD/COAL STOVE & CHIMNEY	200	145	155
BATH TUB	100	65	70

**FREIGHT COSTS PER 100 LBS.**

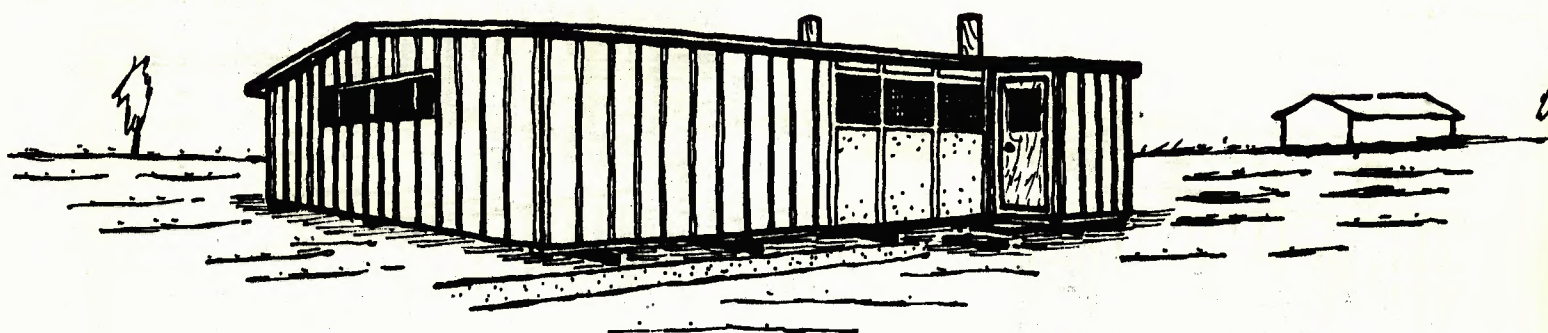
MONTREAL TO: CAPE DORSET	\$4.60
RESOLUTE BAY	7.60
WHALE COVE	3.85
BAKER LAKE	4.85
GRISE FIORD	7.60
FORT CHIMO	3.10

WATERWAYS TO: INUVIK	\$4.52
TUKTOYAKTUK	4.52
SACHS HBR.	6.35
COPPERMINE	6.35
SPENCE BAY	8.40
AKLAVIK	4.52

NOTE: These figures are subject to change

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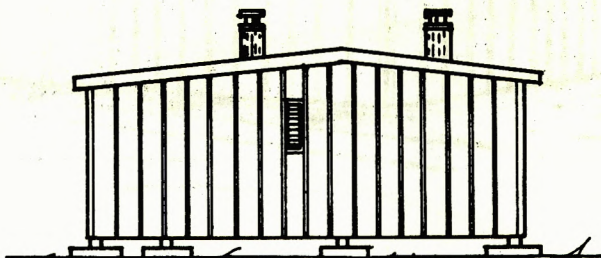
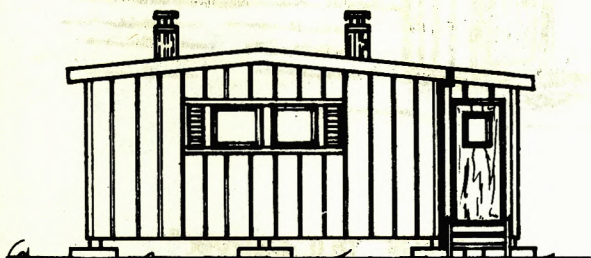
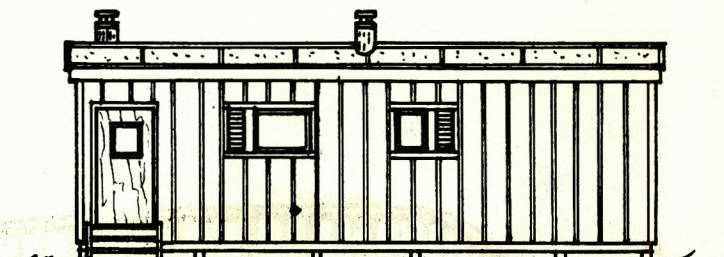
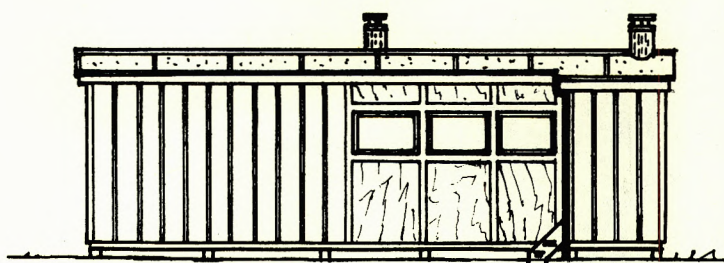
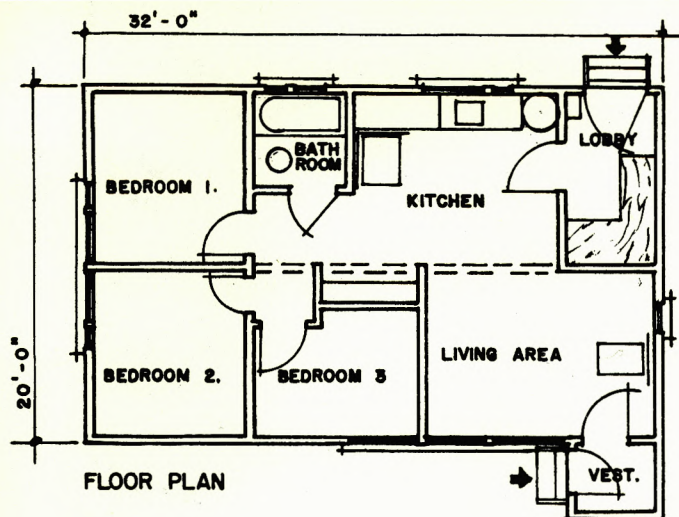


**"THE PULAARVIK"  
(STD. CONSTRUCTION)**

The Pulaavik is a five-room house consisting of living area, kitchen, three bedrooms, a bathroom and entrance through a vestibule, or through a lobby which also provides storage space. The walls are fir plywood on studs, unfinished on the interior and stained on the exterior. The floor is fir plywood laid on joists and covered by sheet linoleum. The roof is fir plywood laid on joists and protected by Neoprene Hypalon, a pliant plastic finish.

As a special feature, there is a coloured exterior panel under the front windows.

The Pulaarvik is available in prefabricated construction (see page 10) or standard construction (see page 16). It is also available in log construction (see page 25 for description).



THREE BEDROOM HOUSE  
(STD. CONSTRUCTION)

"PULAAARVIK"  
STANDARD PLAN NO: 409  
SCALE: 3/32" = 1'-0"

**BASIC HOUSE**

**\* BASIC ELEC. MTLs.**

**BASIC MECH. MTLs.**

PLASTIC WATER TANK

SINK

OIL STOVE & CHIMNEY

CHEMICAL TOILET

OIL SPACE HEATER & CHIMNEY

**BASIC TOTALS**

\* May be excluded at Purchaser's option

**ALTERNATIVES (REVISE BASIC FIGURES ACCORDINGLY)**

STEEL WATER TANK

WOOD/COAL STOVE & CHIMNEY

WOOD/COAL SPACE HEATER & CHIMNEY

BATH TUB

**FREIGHT COSTS PER 100 LBS.**

MONTREAL TO: CAPE DORSET	\$4.60
RESOLUTE BAY	7.60
WHALE COVE	3.85
BAKER LAKE	4.85
GRISE FIORD	7.60
FORT CHIMO	3.10

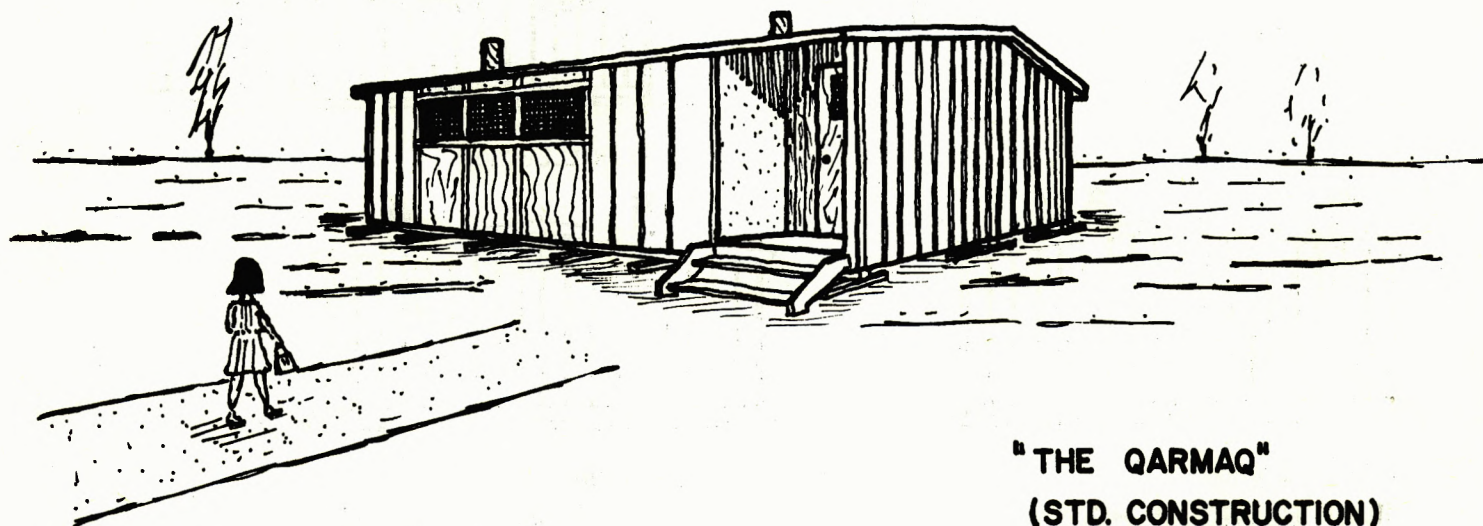
WATERWAYS TO: INUVIK	\$4.52
TUKTOYAKTUK	4.52
SACHS HRB.	6.35
COPPERMINE	6.35
SPENCE BAY	8.40
AKLAVIK	4.52

EST. WGT. LBS.	COST FOR MONT.	COST FOB W/WYS
22,000	3,410	3,555
310	270	285
30	40	50
5	20	25
270	150	160
20	30	35
180	160	170
22,815	4,080	4,280

NOTE: These figures are subject to change

February, 1965.





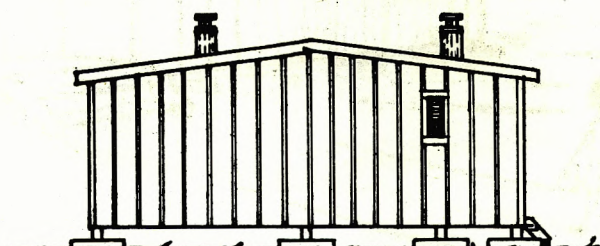
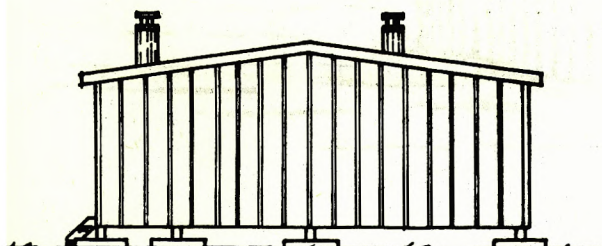
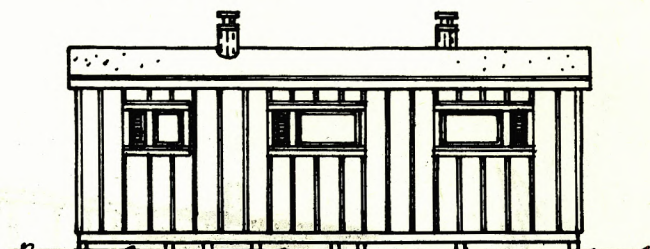
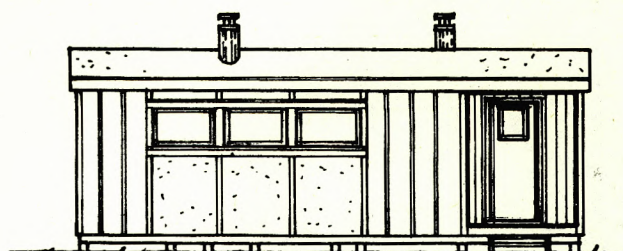
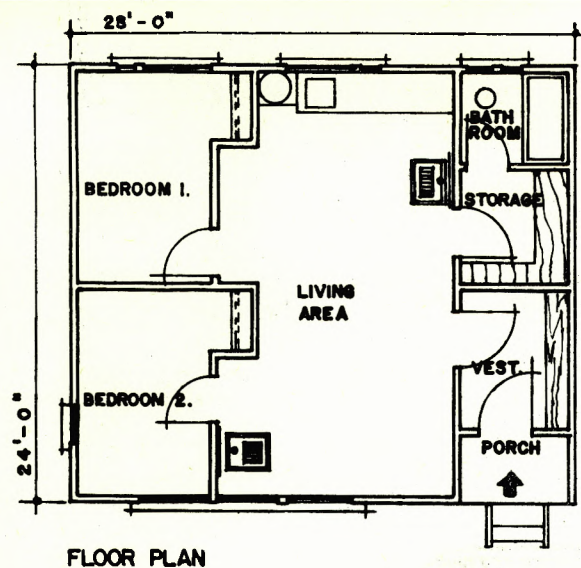
**"THE QARMAQ"**  
**(STD. CONSTRUCTION)**

The Qarmaq is a three-room house, consisting of a living area, two bedrooms, a vestibule, a storage room and a bathroom.

The floor is fir plywood laid on joists and covered by sheet linoleum. The walls are fir plywood on studs, unfinished on the interior and stained on the exterior. The roof is fir plywood laid on joists and protected by Neoprene Hypalon, a pliant plastic finish.

The Qarmaq has a protected entrance, provided by a porch outside the vestibule.

The Qarmaq is available in prefabricated construction (see page 12) or conventional construction (see page 18).



**TWO BEDROOM HOUSE  
(STD. CONSTRUCTION)**

**"THE QARMAQ"  
STANDARD PLAN NO: 410  
SCALE: 3/32" = 1'-0"**

<b>BASIC HOUSE</b>	
* <b>BASIC ELEC. MTLs.</b>	
<b>BASIC MECH. MELS.</b>	
PLASTIC WATER TANK	
SINK	
OIL STOVE & CHIMNEY	
CHEMICAL TOILET	
OIL SPACE HEATER & CHIMNEY	

EST. WGT. LBS.	COST FOB MONT.	COST FOB W/WYS
22,000	3,520	3,670
270	300	320
30	40	50
5	20	25
270	150	160
20	30	35
180	160	180
<b>22,775</b>	<b>4,220</b>	<b>4,440</b>

**BASIC TOTALS**

\* May be excluded at Purchaser's option

**ALTERNATIVES (REVISE BASIC FIGURES ACCORDINGLY)**

STEEL WATER TANK	320	140	150
WOOD/COAL STOVE & CHIMNEY	200	145	155
WOOD/COAL SPACE HEATER & CHIMNEY	260	180	190
BATH TUB	100	65	70

**FREIGHT COSTS PER 100 LBS.**

MONTREAL TO: CAPE DORSET	\$4.60
RESOLUTE BAY	7.60
WHALE COVE	3.85
BAKER LAKE	4.85
GRISE FIORD	7.60
FORT CHIMO	3.10

WATERWAYS TO: INUVIK	\$4.52
TUKTOYAKTUK	4.52
SACHS HBR.	6.35
COPPERMINE	6.35
SPENCE BAY	8.40
AKLAVIK	4.52

NOTE: These figures are subject to change

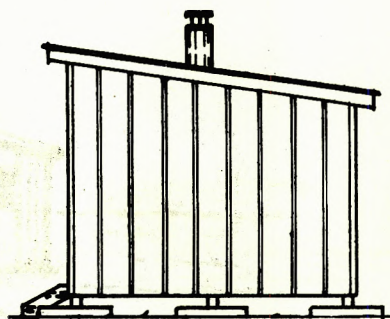
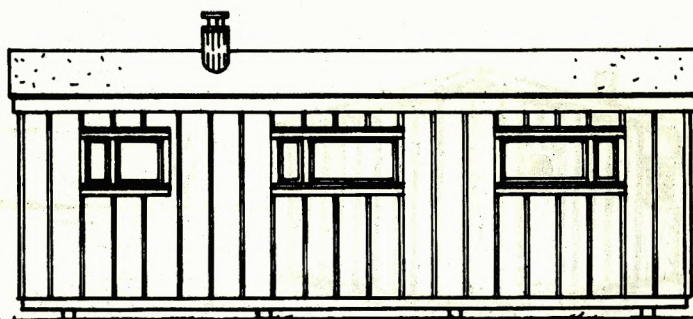
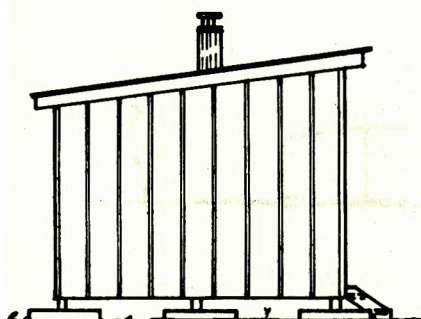
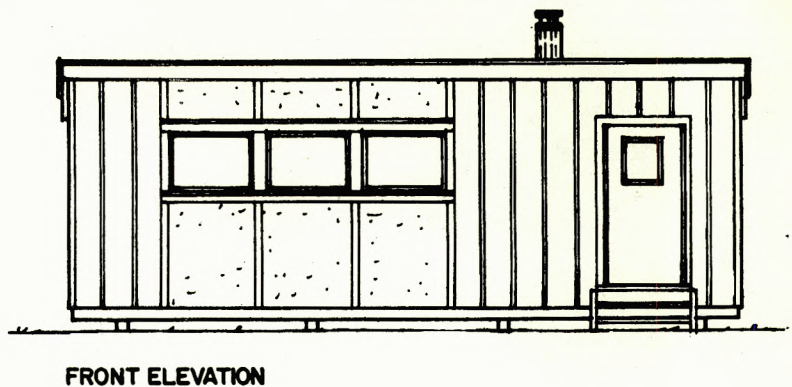
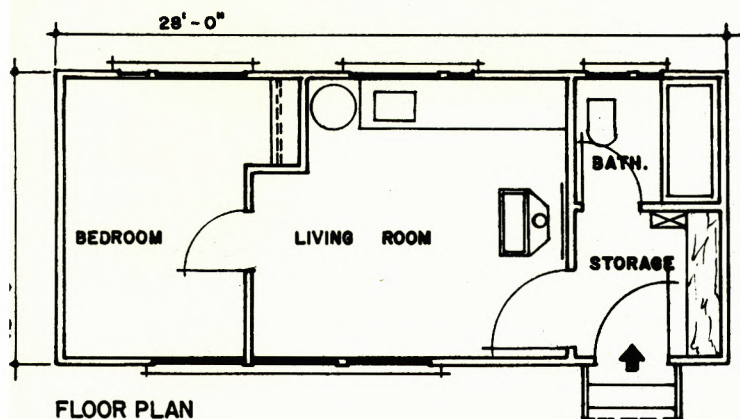
February, 1965





The Tisi is a two-room house consisting of a living room, bedroom, bathroom and vestibule. The walls are fir plywood on studs, unfinished on the interior, stained on the exterior. The floor is fir plywood laid on joists and covered by sheet linoleum. The roof is fir plywood laid on joists and protected by Neoprene Hypalon, a pliant plastic finish.

The Tisi is available in both prefabricated construction (see page 8) and conventional construction (see page 20).



**ONE BEDROOM HOUSE  
(STD. CONSTRUCTION)**

**"THE TISI"  
STANDARD PLAN NO: 411  
SCALE: 1/8" = 1'-0"**

	EST. WGT. LBS.	COST FOB MONT.	COST FOB W/WYS
<b>BASIC HOUSE</b>	12,200	1,860	1,935
* <b>BASIC ELEC. MTLs.</b>	260	200	215
<b>BASIC MECH. MTLs.</b>			
PLASTIC WATER TANK	30	40	50
SINK	5	20	25
OIL STOVE & CHIMNEY	270	150	160
CHEMICAL TOILET	20	30	35
<b>BASIC TOTALS</b>	<b>12,785</b>	<b>2,300</b>	<b>2,420</b>

\* May be excluded at Purchaser's option

**ALTERNATIVES (REVISE BASIC FIGURES ACCORDINGLY)**

STEEL WATER TANK	320	140	150
WOOD/COAL STOVE & CHIMNEY	200	145	155
BATH TUB	100	65	70

**FREIGHT COST PER 100 LBS.**

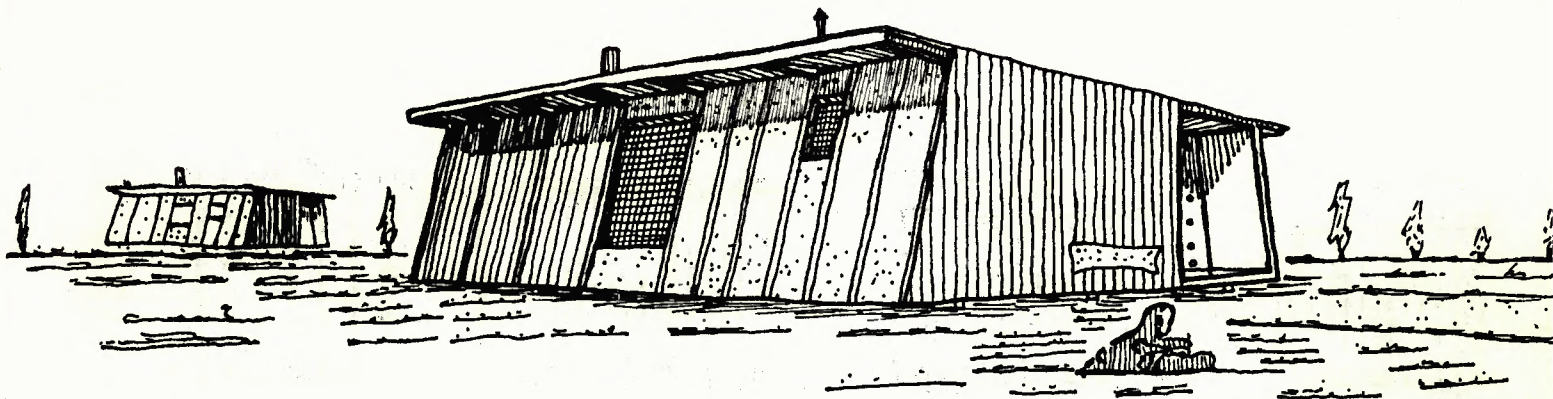
MONTREAL TO: CAPE DORSET	\$4.60
RESOLUTE BAY	7.60
WHALE COVE	3.85
BAKER LAKE	4.85
GRISE FIORD	7.60
FORT CHIMO	3.10

WATERWAYS TO: INUVIK	\$4.52
TUKTOYAKTUK	4.52
SACHS HBR.	6.35
COPPERMINE	6.35
SPENCE BAY	8.40
AKLAVIK	4.52

NOTE: These figures are subject to change

February, 1965



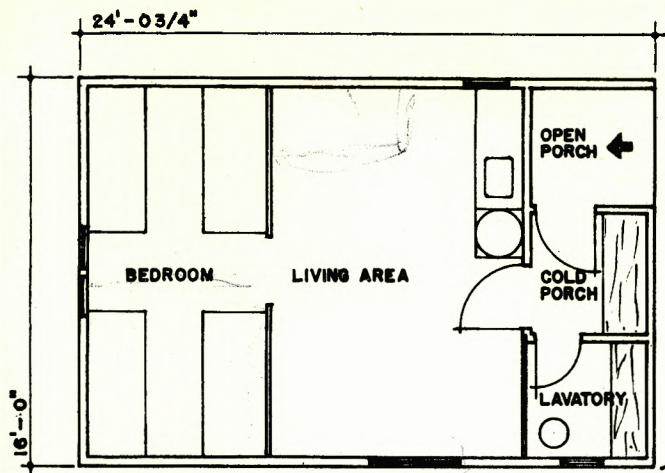


### **"THE ANGIRRAQ"**

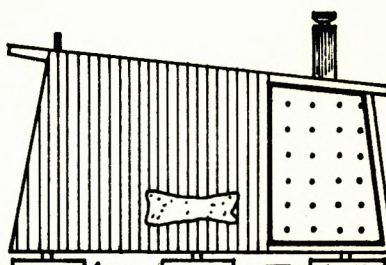
The Angirraq is a two-room house consisting of a living area, a bedroom, an open porch leading into a cold porch, and a lavatory. The walls are fir plywood on studs, with some interior walls painted. The floor is fir plywood laid on joists and covered by sheet linoleum. The roof is fir plywood laid on joists and protected by Neoprene Hypalon, a pliant plastic finish.

The Angirraq has the two long sides angled inward, so that, when viewed from the entrance, the house has a slight resemblance to a tent. The open porch protects the entrance. The exterior of the house is plywood, cedar veneered, with one coloured wall at the entrance.

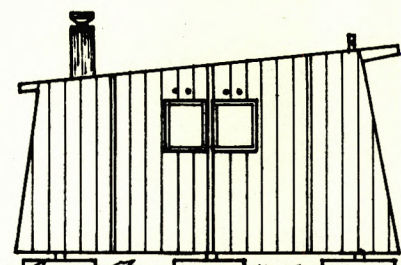
The Angirraq is available in prefabricated construction or conventional construction.



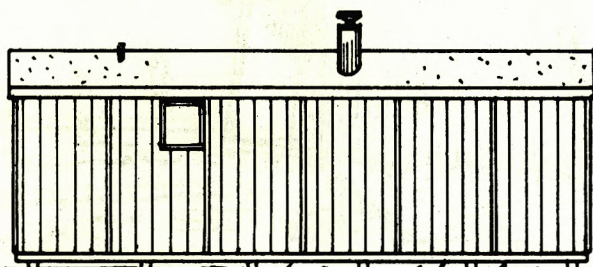
FLOOR PLAN



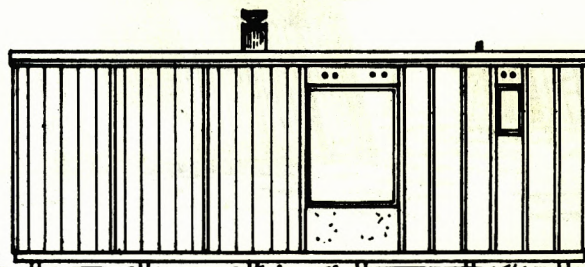
FRONT ELEVATION



REAR ELEVATION



RIGHT ELEVATION



LEFT ELEVATION

**ONE BEDROOM HOUSE (PREFABRICATED)**

**"THE ANGIRRAQ"**

**STANDARD PLAN NO. 424**

SCALE: 1/8" = 1'-0"

	EST. WGT. LBS.	COST FOB MONT.	COST FOB W/WYS
<b>BASIC HOUSE</b>	10,865	1,910	2,105
* <b>BASIC ELEC. MTLs.</b>	300	150	165
<b>BASIC MECH. MTLs.</b>			
PLASTIC WATER TANK	30	40	45
SINK	5	20	20
OIL STOVE & CHIMNEY	200	150	155
CHEMICAL TOILET	20	30	35
<b>BASIC TOTALS</b>	11,420	2,400	2,525

\* May be excluded at Purchaser's option

**ALTERNATIVES (REVISE BASIC FIGURES ACCORDINGLY)**

STEEL WATER TANK	320	140	150
WOOD/COAL STOVE & CHIMNEY	200	145	155
BATH TUB	100	65	70

**FREIGHT COSTS PER 100 LBS.**

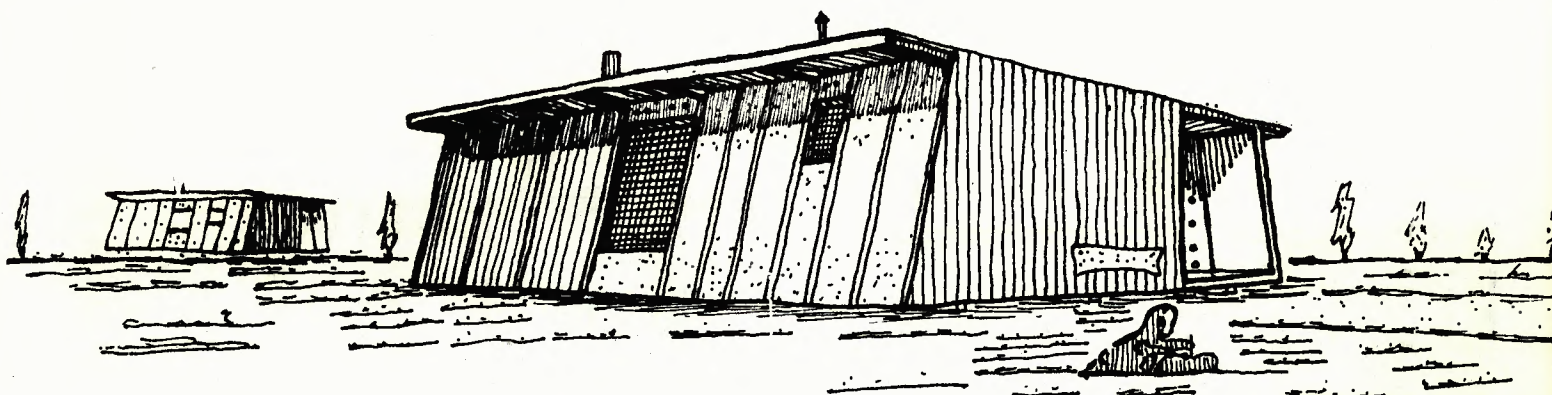
MONTREAL TO: CAPE DORSET	\$4.60
RESOLUTE BAY	7.60
WHALE COVE	3.85
BAKER LAKE	4.85
GRISE FIORD	7.60
FORT CHIMO	3.10

WATERWAYS TO: INUVIK	\$4.52
TUKTOYAKTUK	4.52
SACHS HBR.	6.35
COPPERMINE	6.35
SPENCE BAY	8.40
AKLAVIK	4.52

NOTE: These figures are subject to change

February, 1965.



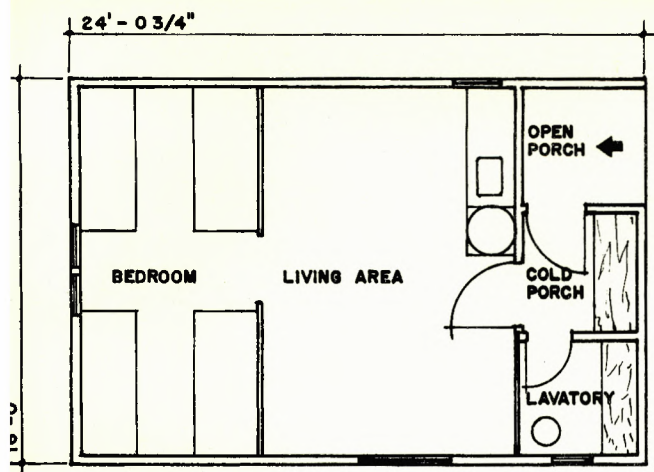


### "THE ANGIRRAQ"

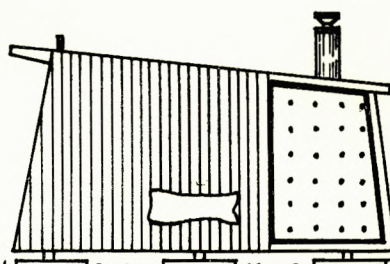
The Angirraq is a two-room house consisting of a living area, a bedroom, an open porch leading into a cold porch, and a lavatory. The walls are fir plywood on studs, with some interior walls painted. The floor is fir plywood laid on joists and covered by sheet linoleum. The roof is fir plywood laid on joists and protected by Neoprene Hypalon, a pliant plastic finish.

The Angirraq has the two long sides angled inward, so that, when viewed from the entrance, the house has a slight resemblance to a tent. The open porch protects the entrance. The exterior of the house is plywood, cedar veneered, with one coloured wall at the entrance.

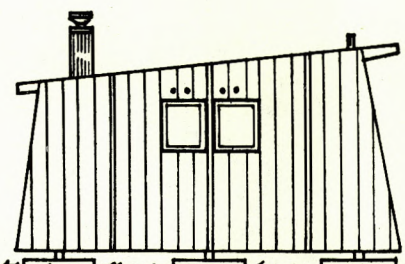
The Angirraq is available in prefabricated construction or conventional construction.



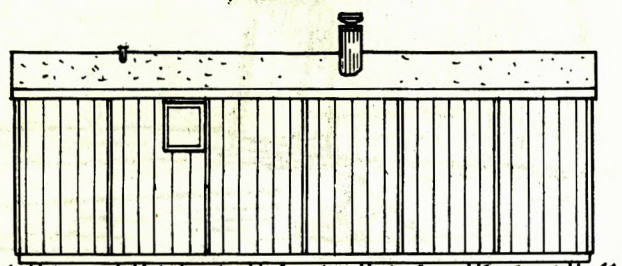
FLOOR PLAN



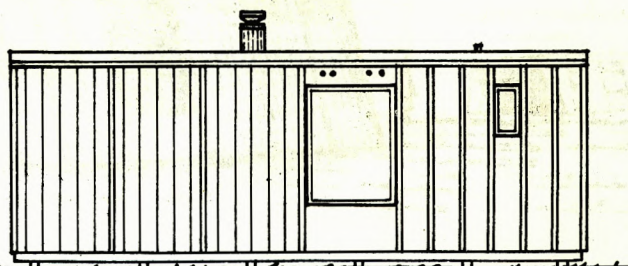
FRONT ELEVATION



REAR ELEVATION



RIGHT ELEVATION



LEFT ELEVATION

**ONE BEDROOM HOUSE  
(STD. CONSTRUCTION)**

**"THE ANGIIRRAQ"  
STANDARD PLAN NO. 428  
SCALE: 1/8" = 1'-0"**

	EST. WGT. LBS.	COST FOB MONT.	COST FOB W/WYS
<b>BASIC HOUSE</b>	12,017	1,600	1,700
* <b>BASIC ELEC. MTLs.</b>	300	150	165
<b>BASIC MECH. MTLs.</b>			
PLASTIC WATER TANK	30	40	45
SINK	5	20	20
OIL STOVE & CHIMNEY	200	150	155
CHEMICAL TOILET	20	30	35
<b>BASIC TOTALS</b>	12,572	1,990	2,120

\* May be excluded at Purchaser's option

**ALTERNATIVES (REVISE BASIC FIGURES ACCORDINGLY)**

STEEL WATER TANK	320	140	150
WOOD/COAL STOVE & CHIMNEY	200	145	155
BATH TUB	100	65	70

**FREIGHT COSTS PER 100 LBS.**

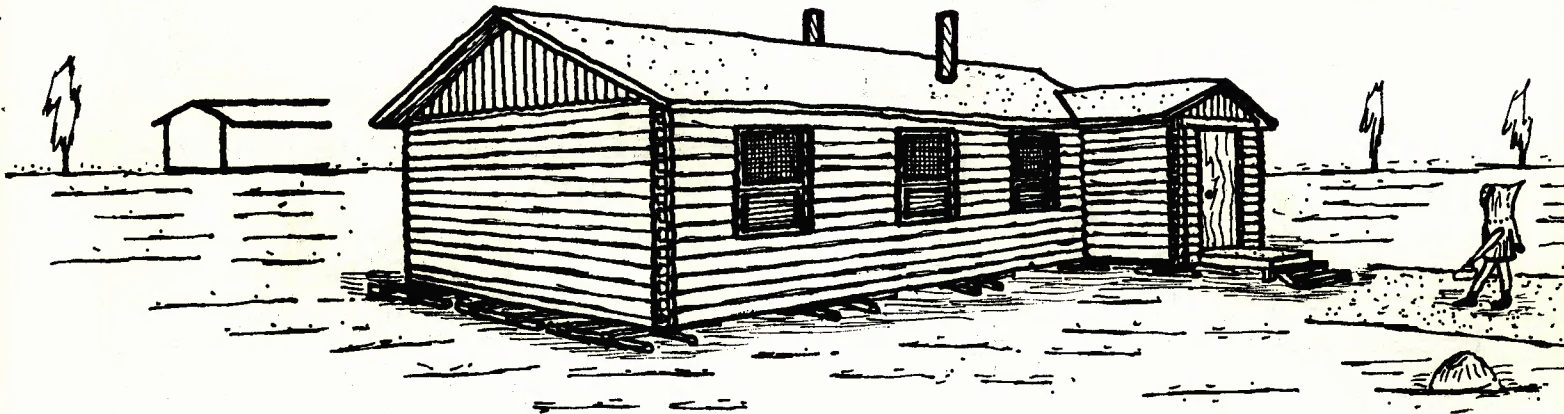
MONTREAL TO: CAPE DORSET	\$4.60
RESOLUTE BAY	7.60
WHALE COVE	3.85
BAKER LAKE	4.85
GRISE FIORD	7.60
FORT CHIMO	3.10

WATERWAYS TO: INUVIK	\$4.52
TUKTOYAKTUK	4.52
SACHS HBR.	6.35
COPPERMINE	6.35
SPENCE BAY	8.40
AKLAVIK	4.52

NOTE: These figures are subject to change

February, 1965.



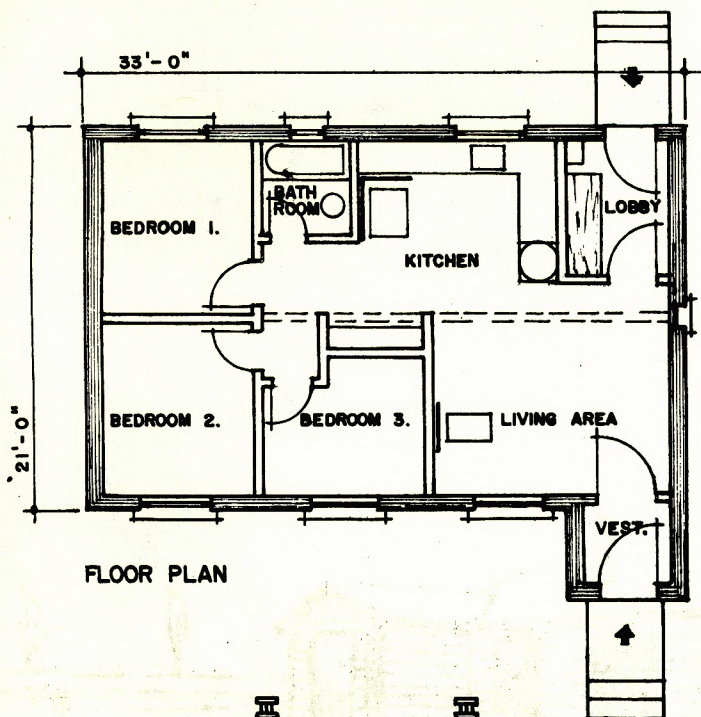


**"THE PULAARVIK"  
(LOG CONSTRUCTION)**

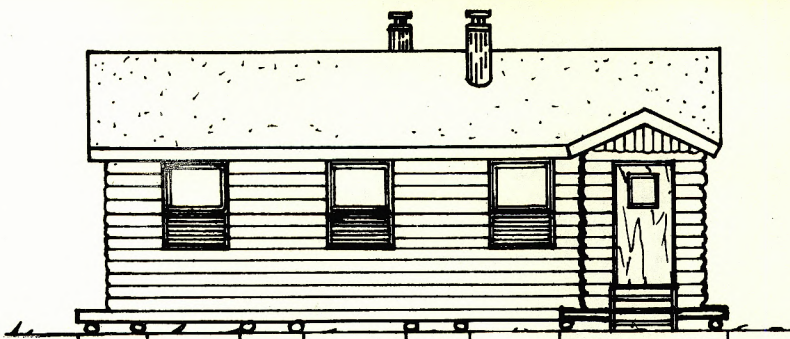
The Pulaavik is a five-room house consisting of living area, kitchen, three bedrooms, a bathroom and entrance through a vestibule, or through a lobby which also provides storage space. The walls are fir plywood on studs, unfinished on the interior and stained on the exterior. The floor is fir plywood laid on joists and covered by sheet linoleum. The roof is fir plywood laid on joists and protected by Neoprene Hypalon, a pliant plastic finish.

As a special feature, there is a coloured exterior panel under the front windows.

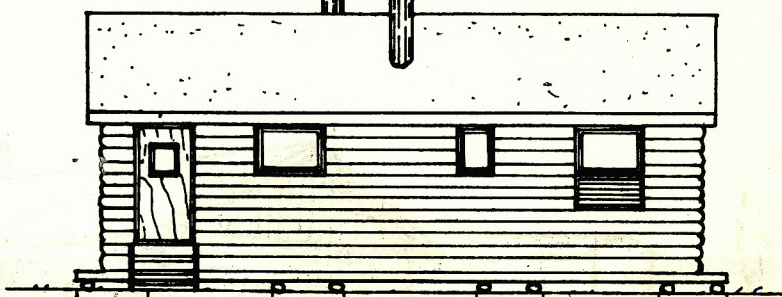
The Pulaavik is available in prefabricated construction (see page 10) or standard construction (see page 16). It is also available in log construction (see page 25 for description).



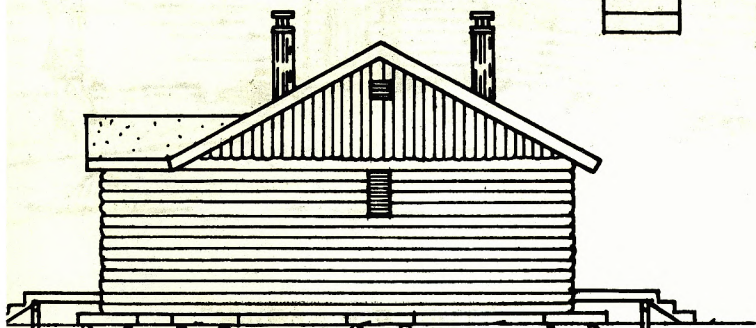
FLOOR PLAN



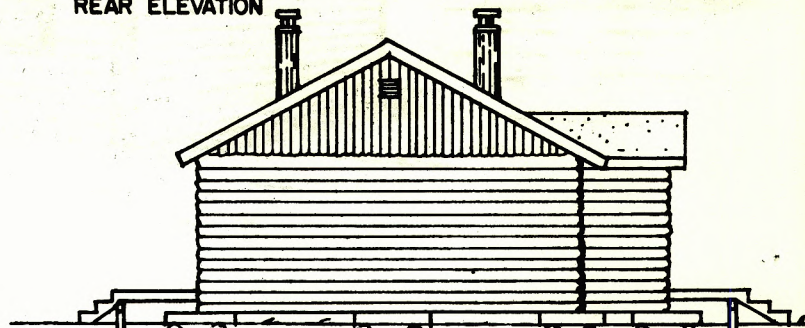
FRONT ELEVATION



REAR ELEVATION



RIGHT ELEVATION



LEFT ELEVATION

### THREE BEDROOM HOUSE (LOG CONSTRUCTION)

SCALE: 3/32" = 1'-0"

### "PULAARVIK" STANDARD PLAN NO. 416

**BASIC HOUSE** \*(includes 20,000 lbs. for logs)  
**\* BASIC ELEC. MTLs.**  
**BASIC MECH. MTLs.**  
 PLASTIC WATER TANK  
 SINK  
 OIL STOVE & CHIMNEY  
 CHEMICAL TOILET  
 OIL SPACE HEATER & CHIMNEY

EST. WGT. LBS.

COST  
FOB MONT.

COST  
FOB W/WYS

38,000

3,540

3,890

270

270

285

30

40

50

SINK

5

20

25

OIL STOVE & CHIMNEY

200

150

160

CHEMICAL TOILET

20

30

35

OIL SPACE HEATER & CHIMNEY

180

160

180

#### BASIC TOTALS

38,705

4,210

4,625

\*May be excluded at Purchaser's option

#### ALTERNATIVES (REVISE BASIC FIGURES ACCORDINGLY)

STEEL WATER TANK

320

140

150

WOOD/COAL STOVE & CHIMNEY

200

145

155

WOOD/COAL SPACE HEATER & CHIMNEY

260

180

190

BATH TUB

100

65

70

#### FREIGHT COSTS PER 100 LBS.

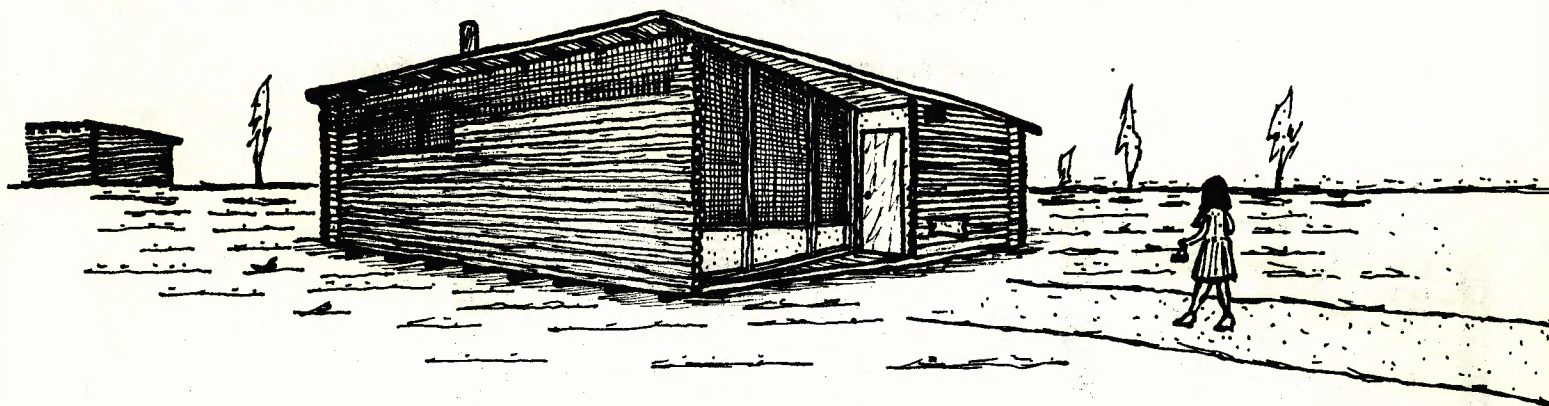
MONTREAL TO: CAPE DORSET	\$4.60
RESOLUTE BAY	7.60
WHALE COVE	3.85
BAKER LAKE	4.85
GRISE FIORD	7.60
FORT CHIMO	3.10

WATERWAYS TO: INUVIK	\$4.52
TUKTOYAKTUK	4.52
SACHS HBR.	6.35
COPPERMINE	6.35
SPENCE BAY	8.40
AKLAVIK	4.52

NOTE: These figures are subject to change

February, 1965.

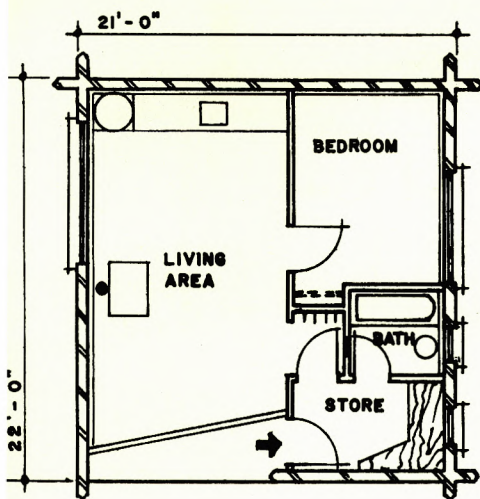




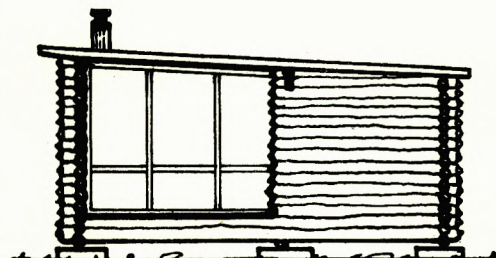
**"THE TINKLE"**

The Tinkle is a log construction, two-room house consisting of a living area, a bedroom, bathroom and storage entrance. The walls are log with 2 x 2 battens and 2-inch insulation lining, with some interior walls painted, and the exterior logs treated. The roof is fir plywood laid on joists and protected by a Neoprene Hypalon, a pliant plastic finish.

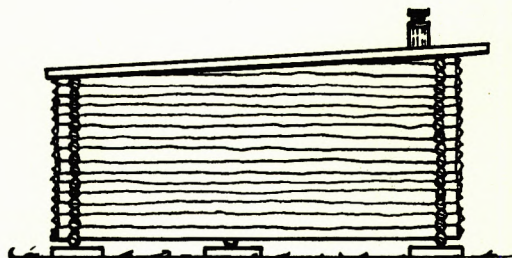
The Tinkle has an unusual, angled entrance. There is a coloured panel at the entrance. For elevations and descriptions, see page 28.



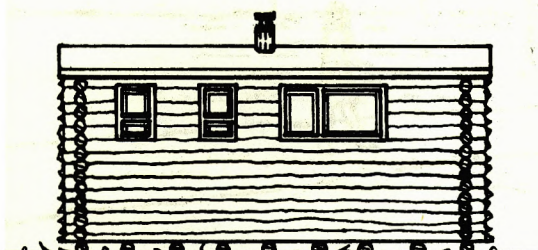
FLOOR PLAN



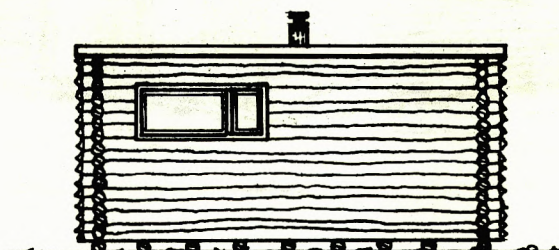
FRONT ELEVATION



REAR ELEVATION



RIGHT ELEVATION



LEFT ELEVATION

**ONE BEDROOM HOUSE  
(LOG CONSTRUCTION)**

**"THE TINKLE"  
STANDARD PLAN NO. 417  
SCALE: 3/32" = 1'-0"**

	EST. WGT. LBS.	COST FOB. MONT.	COST FOB W/WYS
<b>BASIC HOUSE</b> *(includes 15000 lb. for logs)	20,000	\$1,660	\$1,815
<b>*BASIC ELEC. MTLs.</b>	270	150	165
<b>BASIC MECH. MTLs.</b>			
PLASTIC WATER TANK	30	40	45
SINK	5	20	20
OIL STOVE & CHIMNEY	200	150	155
CHEMICAL TOILET	20	30	35
<b>BASIC TOTALS</b>	<b>20,525</b>	<b>\$2,050</b>	<b>\$2,235</b>

\* May be excluded at Purchaser's option

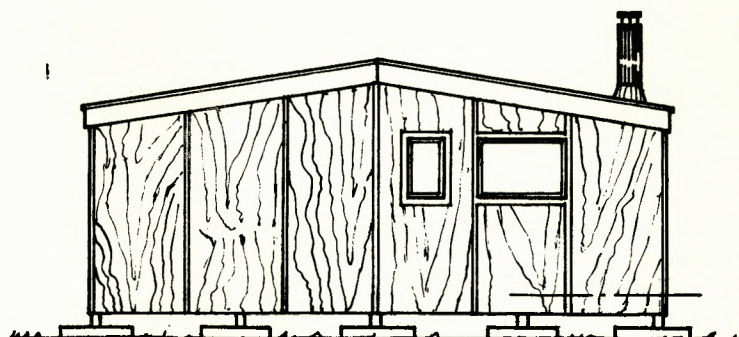
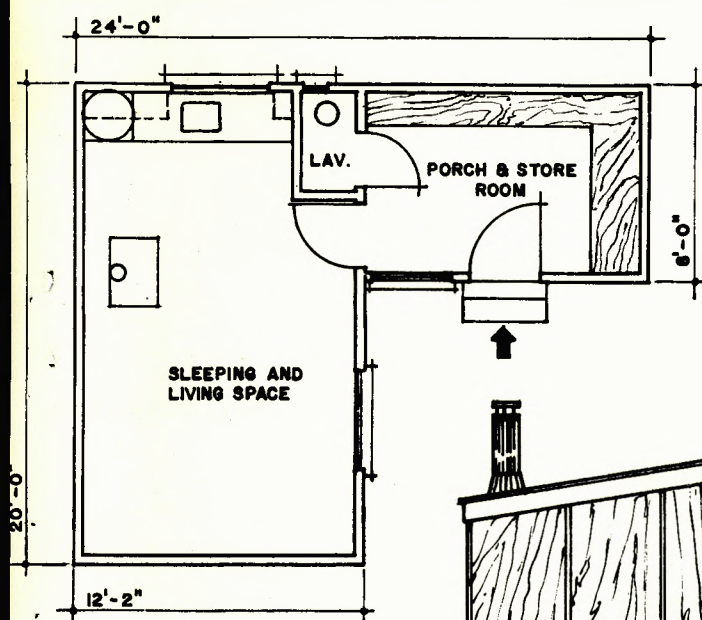
**ALTERNATIVES (REVISE BASIC FIGURES ACCORDINGLY)**

STEEL WATER TANK	320	140	150
WOOD/COAL STOVE & CHIMNEY	200	145	155
BATH TUB	100	65	70
<b>FREIGHT COST PER 100 LBS.</b>			
MONTREAL TO: CAPE DORSET	\$4.60	WATERWAYS TO: INUVIK	\$4.52
RESOLUTE BAY	7.60	TUKTOYAKTUK	4.52
WHALE COVE	3.85	SACHS HBR.	6.35
BAKER LAKE	4.85	COPPERMINE	6.35
GRISE FIORD	7.60	SPENCE BAY	8.40
FORT CHIMO	3.10	AKLAVIK	4.52

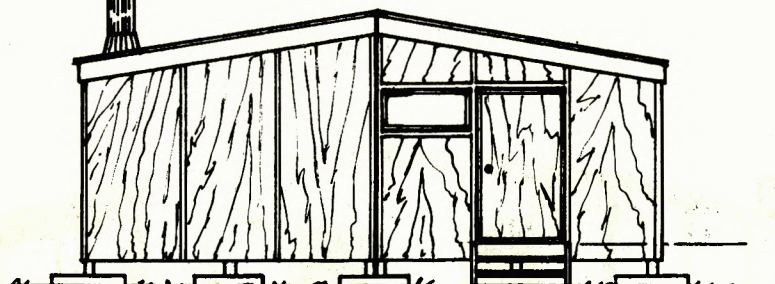
NOTE: These figures are subject to change

February, 1965.

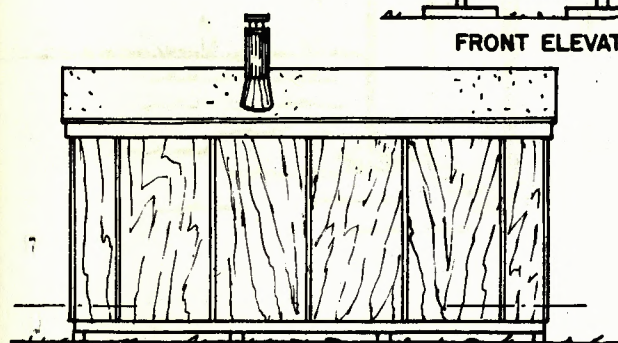




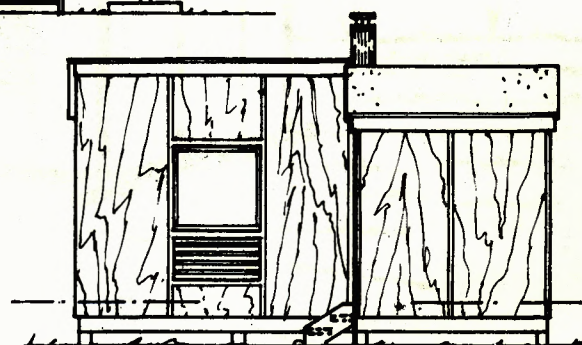
REAR ELEVATION



FRONT ELEVATION



LEFT ELEVATION  
ONE ROOM & PORCH  
(PREFABRICATED)



RIGHT ELEVATION  
"TURSUK"  
STANDARD PLAN NO. 418  
SCALE: 1/8" = 1'-0"

**BASIC HOUSE**  
\* **BASIC ELEC. MTLs.**  
**BASIC MECH. MTLs.**  
PLASTIC WATER TANK  
SINK  
OIL STOVE & CHIMNEY  
CHEMICAL TOILET

**BASIC TOTALS**

\* May be excluded at Purchaser's option

**ALTERNATIVES (REVISE BASIC FIGURES ACCORDINGLY)**

STEEL WATER TANK  
WOOD/COAL STOVE & CHIMNEY  
BATH TUB

**FREIGHT COST PER 100 LBS.**

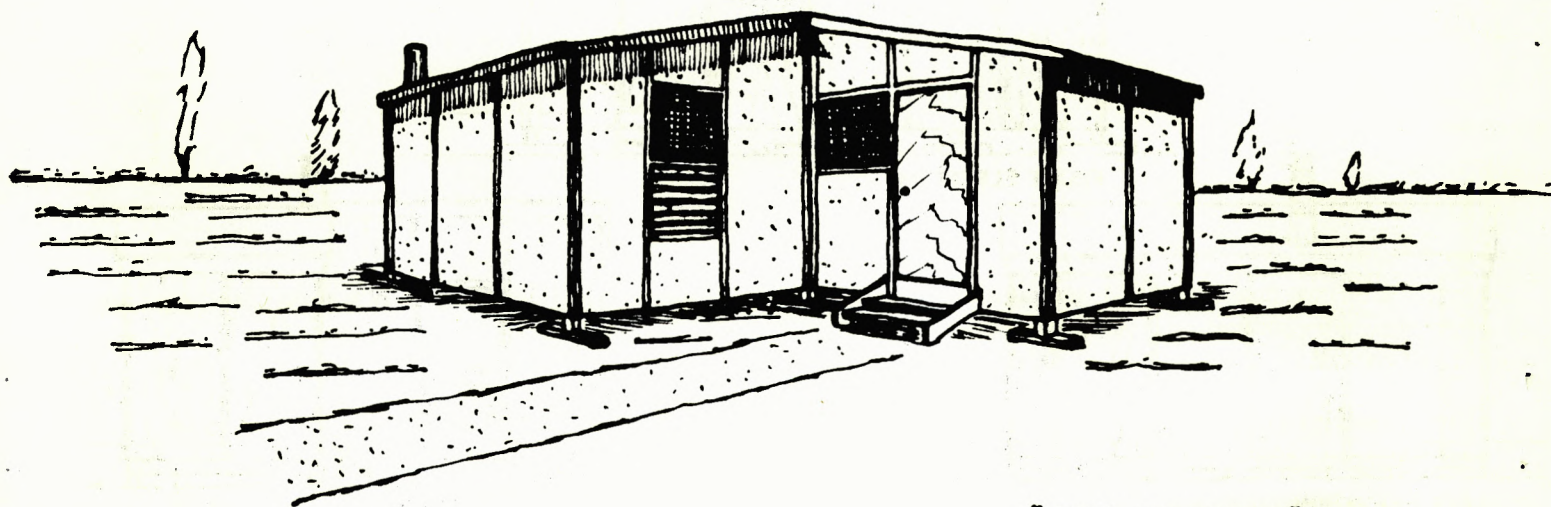
MONTREAL TO: CAPE DORSET \$4.60  
RESOLUTE BAY 7.60  
WHALE COVE 3.85  
BAKER LAKE 4.85  
GRISE FIORD 7.60  
FORT CHIMO 3.10

WATERWAYS TO: INUVIK \$4.52  
TUKTOYAKTUK 4.52  
SACHS HBR. 6.35  
COPPERMINE 6.35  
SPENCE BAY 8.40  
ALKAVIK 4.52

EST. WGT. LBS.	COST FOB MONT.	COST FOB W/WYS
9,275	\$1,840	\$1,960
300	170	185
30	40	45
5	20	20
270	150	155
20	30	35
<b>9,900</b>	<b>\$2,250</b>	<b>\$2,400</b>

NOTE: These figures are subject to change.

February, 1965.



**"THE TURSUK"**

The Tursuuk is an L-shaped house consisting of a large, enclosed porch-storeroom, a lavatory and a sleeping-living area. The floor is fir plywood laid on joists and covered by sheet linoleum. The walls are fir plywood on studs, unfinished on the interior and stained on the exterior. The roof is fir plywood laid on joists and protected by Neoprene Hypalon, a pliant plastic finish.

The Tursuuk is available in prefabricated construction (see page 30) or conventional construction (see page 14).



DEPARTMENT OF NORTHERN AFFAIRS & NATIONAL RESOURCES  
NORTHERN ADMINISTRATION BRANCH

APPLICATION FOR LOAN FROM THE ESKIMO LOAN FUND

The Director,  
Northern Administration Branch,  
Department of Northern Affairs & National Resources,  
Ottawa, Ontario.

1. I (We), being (an) Eskimo(s) of ..... , do  
hereby apply for a loan of \$ ..... under Conditions governing the operation  
of the Eskimo Loan Fund, to be repayable by instalment payments of \$ .....  
per ..... , payable commencing .....

2. Purpose: This loan is requested for the following purposes:

.....  
.....  
.....

3. Loans from other sources (If any applicant has applied for or has already received a loan or credit from any other source,  
state full particulars here).

.....  
.....

4. Subject to I (We) understand the provisions of the Eskimo Loan Fund Conditions and I (we) agree that this  
loan will be governed by the Eskimo Loan Fund Conditions. I (We) agree that all advances made  
to me (us) under this loan will be spent under the supervision of the Director of the Northern  
Administration Branch or his representative.

I (We) direct that advances under this loan are to be made as follows:

To..... the sum of \$.....

To..... the sum of \$.....

To..... the sum of \$.....

Dated at ..... this .....

day of ..... A.D. 19.....

5. Name of applicant(s),	Identification No(s).	Signature of applicant(s) (Syllabics to be used when necessary)
(a).....	.....	(a) .....
(b).....	.....	(b) .....
(c).....	.....	(c) .....

RECOMMENDED (Field Officer) ..... RECOMMENDED .....

Date of Approval..... APPROVED .....

$\Delta_{\text{mc}} \geq d \quad \Delta_{\text{L}} \leq b_{\text{L}} \Delta_{\text{m}} \quad (d \Delta_{\text{L}})$

Решение:  $\Delta ABC \sim \Delta A_1B_1C_1$   $\Delta ABC \sim \Delta A_2B_2C_2$

1. Δμϵ (ι) (J<sup>c</sup>) ▷ϵσΓ▷Jϵ(ι) (J<sup>c</sup>) .....  
 ◁∧Πϵ(ι) (J<sup>c</sup>) ◁◊◊◁PL▷(ι) (C) ΔLεσ \$. .... ∧∧▷ι ◁Γ◊ι  
 ◁PεΓ'εΠ◁Γ ◁◊◊◁Cб ◁PεбC▷ι ΔLεσ ▷μσΓ \$. ....CL.....  
 ΔLε ◁ιJ ▷μΠΓ'εμ ..... ∧∧▷ι ◁Γ◊ι ρ>εΓ ◁PεειLιL ▷dσι  
 ..... .

2.  $\Delta L_a$  (L)  $\Delta J_b > (L)$  (J<sup>c</sup>)  $P_{ad} \Delta b_{\sigma^b}$ :

Four horizontal dotted lines for handwriting practice, evenly spaced across the page.

3.  $\Delta \Gamma \Delta$   $\Delta \Gamma \Delta$ :  $\Delta \Gamma \Delta$  ( $J^c$ ),  $\Delta \Gamma \Delta \Delta \Gamma \Delta \Delta \Gamma \Delta \Delta \Gamma \Delta$   $\Delta \Gamma \Delta$

.....

.....

(Δφ ΔΛΠ< Γ'JL ΔΚΠΛΔσ ΔΚΚΔΓΕΓΓΓΓΓΓ< ΔΠΓσ<  
ΔΚΚΔΓ<, ΔΚΚΔΠΛΠΛΔσ ΔΠΓσ< ΓΔΔ ΔΒΔΠΝΥΗΝΔ  
Δ<σ)

.....

.....

4.  $\wedge d \leq n \leq$   
 $\triangleleft \cup \cup \triangleleft \wedge \cup$

[illegible]



