



UNHCR Northern Caucasus

Durable Housing Solutions 2005-2010 in North Ossetia-Alania, Ingushetia & Chechnya
René Edward Knupfer - MSc ETH Arch - Technical Coordinator UNHCR Vladikavkaz

**Workshop on Capitalisation of the Programme
“Durable Housing Solutions (DuSo)” in the North Caucasus 2004 - 2010
Vladikavkaz - Thursday 9 December 2010**

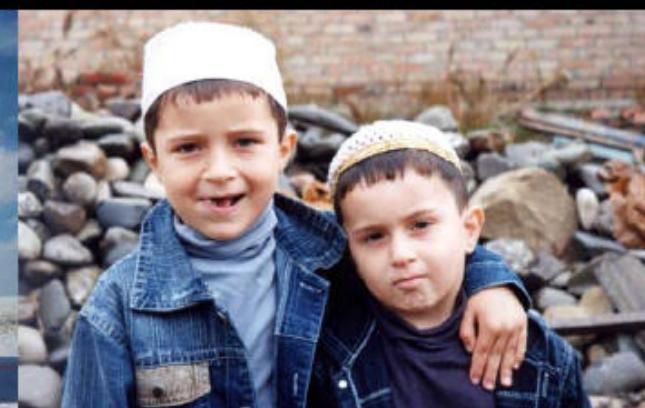


**UNHCR Northern Caucasus
Shelter Programmes**

Survey 2005 - 2010

UNHCR Sub-Office Vladikavkaz

update as on 31 October 2010





UNHCR Northern Caucasus Shelter Programmes 2005 - 2010

type of shelter	type of programme	implementation	housing units completed 2005 - 2010 (31/10/'10)			
			Ingushetia (RI)	Chechnya (ChR)	North Ossetia-Alania (RNOA)	total (RI + ChR + RNOA)
individual houses	new building:	RUS48 standard	"turn key" (TK)	122	5	7
individual houses	new building:	RUS48 standard	"self help" (SH)	99		99
individual houses	new building:	non standard	"self help" (SH)	40		40
individual houses	new building:	RUS60 simplified standard	"self help" (SH)		31	31
individual houses	new building:	non standard, 48m ² limited	"self help" (SH)	90		90
individual houses	new building:	miscellaneous or no standard	"turn key" (TK)		7	7
individual houses	new building:	miscellaneous or no standard	"self help" (SH)		12	12
individual houses	rehabilitation:	"roof + one dry room"	"self help" (SH)	1066		1066
temporary shelter	"box tents" (BT):	prefab hut, set supply	"self help" (SH)	438	1016	31
						1485

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individual houses	new building:	RUS60 simplified standard	"self help" (SH)		31



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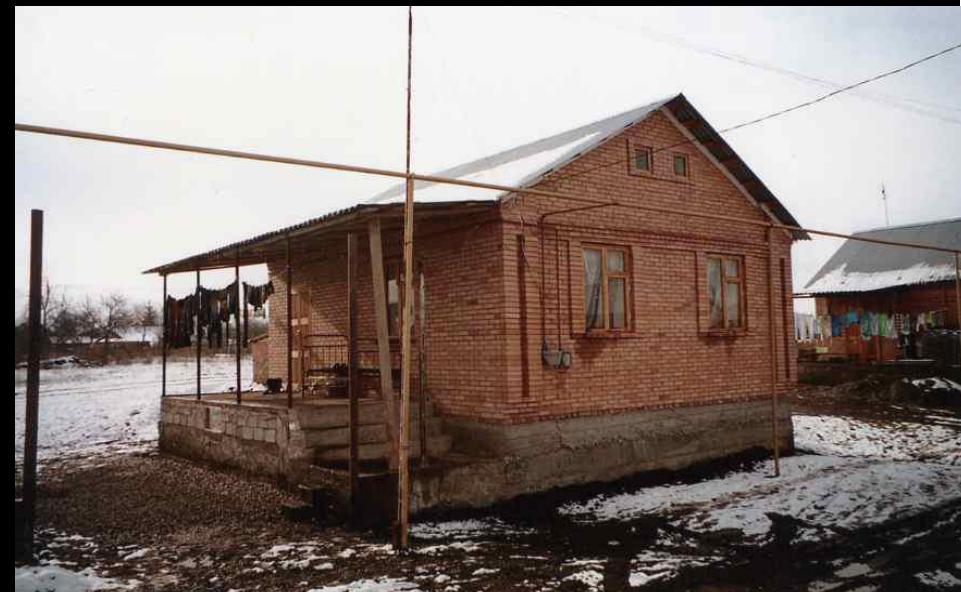
UNHCR Northern Caucasus Shelter Programmes 2005 - 2010

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individual houses	new building:	miscellaneous or no standard	"turn key" (TK)	↗	total (RI + ChR + RNOA) ↗
					7



UNHCR Northern Caucasus Shelter Programmes 2005 - 2010

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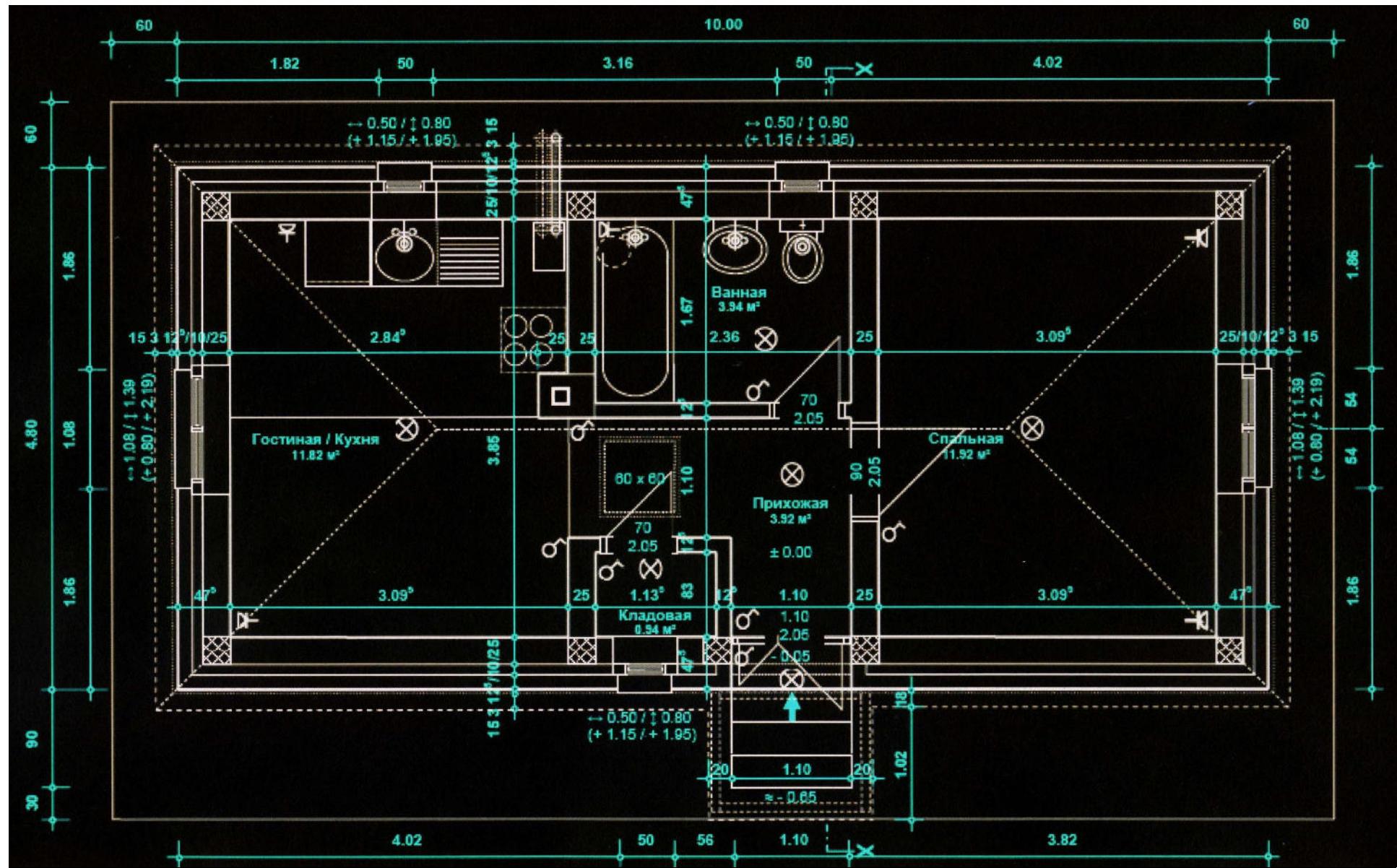
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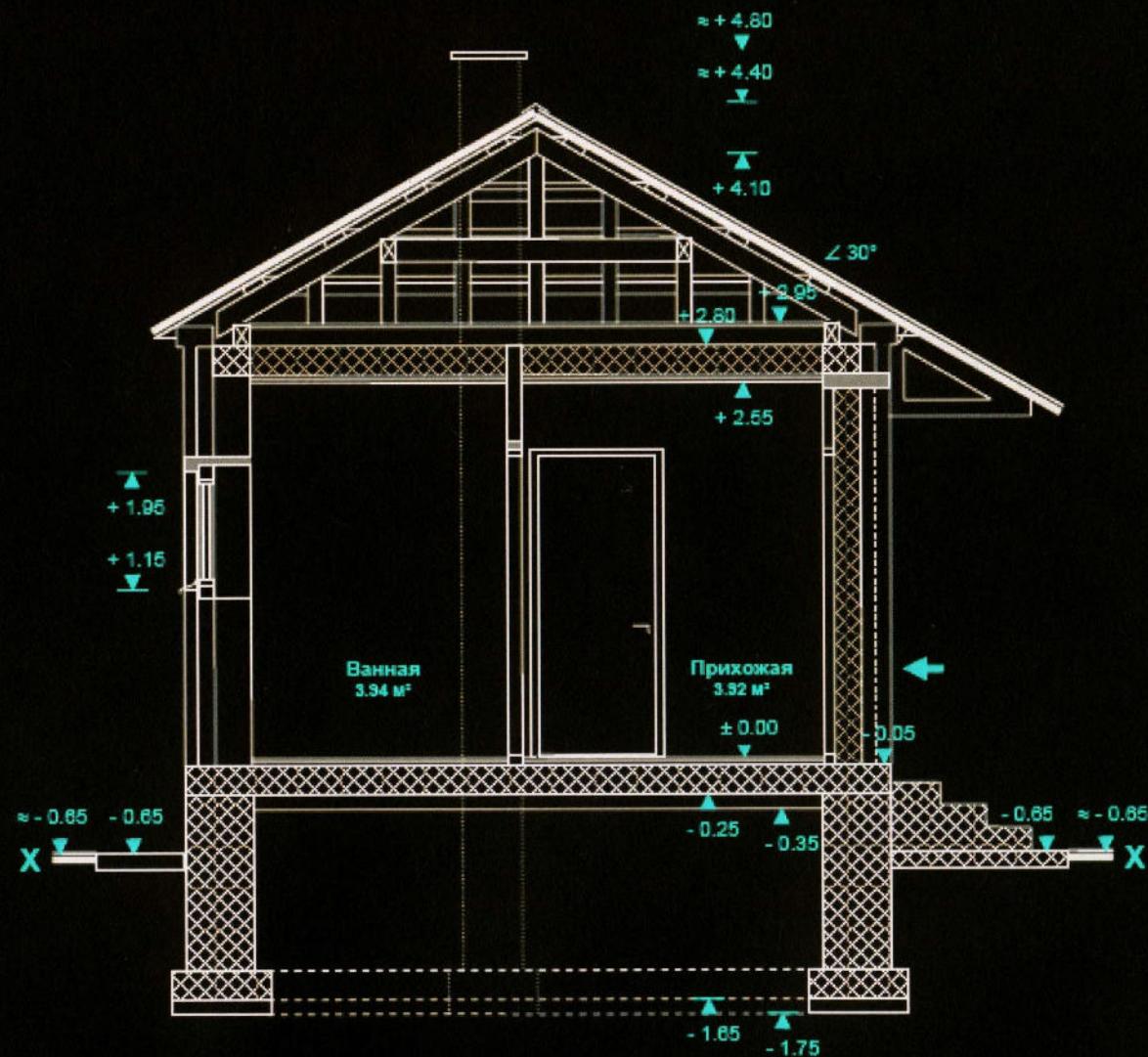


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RUS 48 Standard Houses Shelter Programme 2006-2010



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RUS 48 Standard Houses Shelter Programme 2006-2010



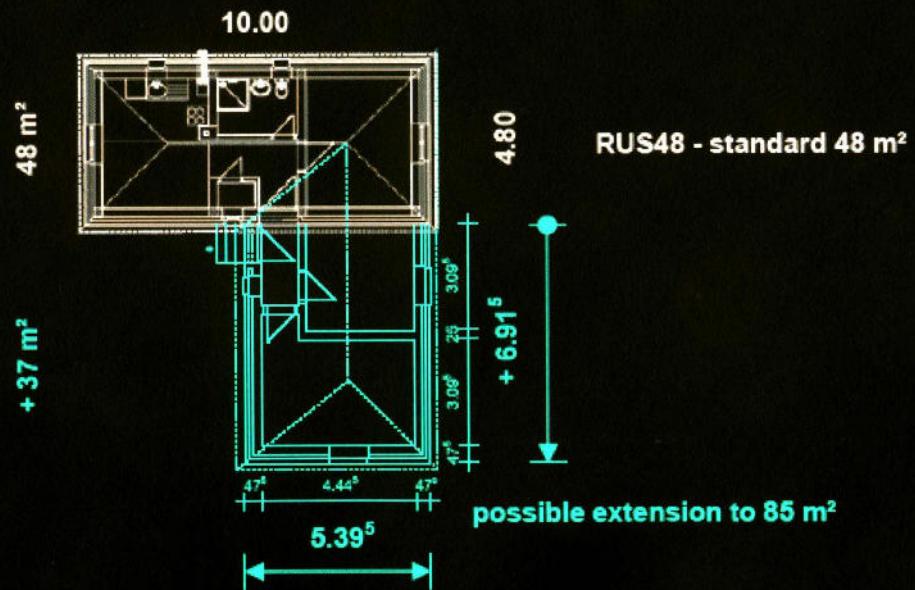
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RUS 48 Standard Houses Shelter Programme 2006-2010

RUS 48 UNHCR Northern Caucasus Standard House

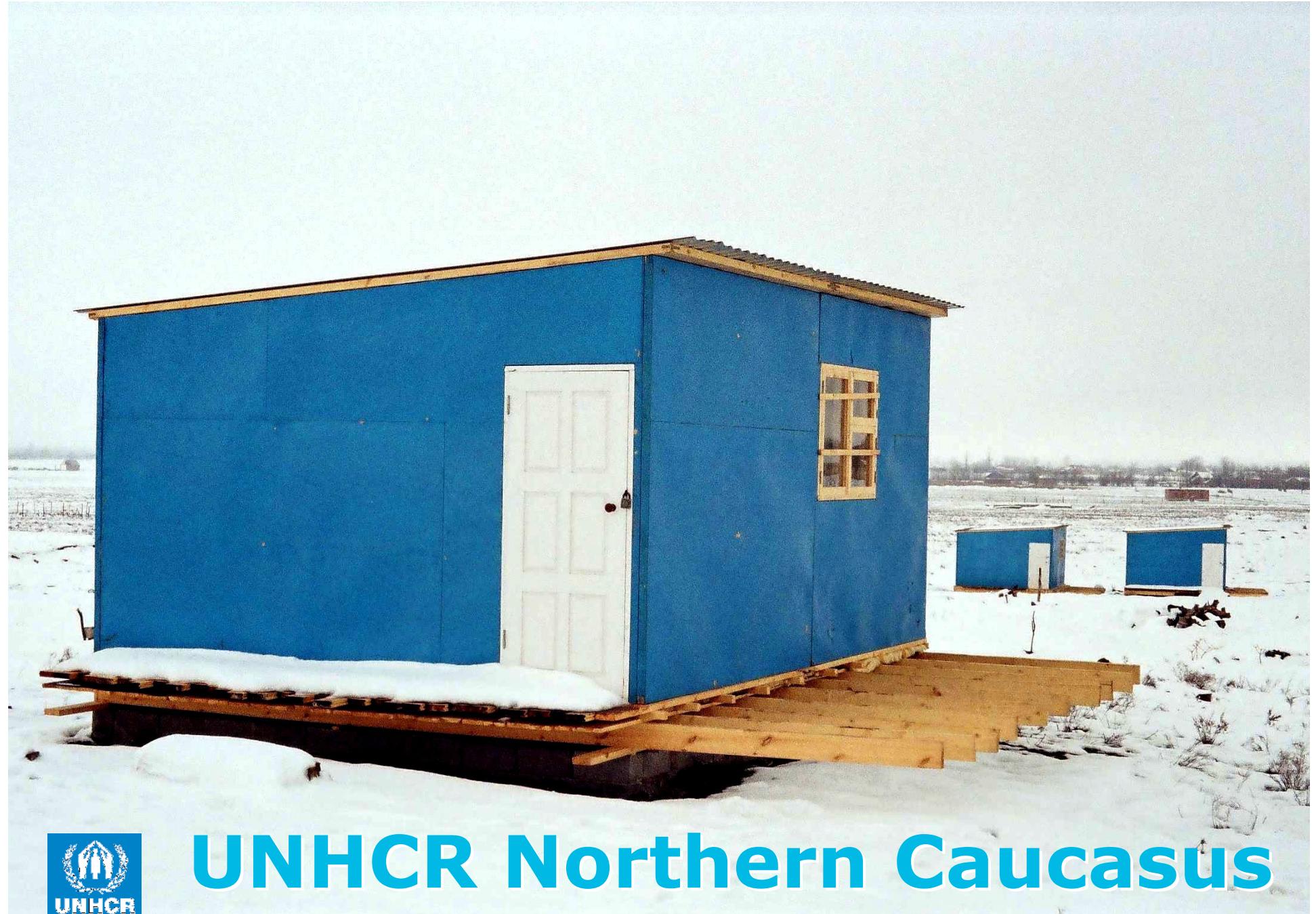
Типовой дом 48

optional house extension

- ⇒ RUS48 UNHCR "Turn-Key" Standard House; $10.00 \text{ m} \times 4.80 \text{ m} = 48 \text{ m}^2$
- ⇒ optionally extendable ($+ 37 \text{ m}^2$) from 48 m^2 ($10.00 \text{ m} \times 4.80 \text{ m}$) to 85 m^2 :
 $+ [(3.09^5 + 0.25 + 3.09^5 + 0.47^5) \times (0.47^5 + 4.44^5 + 0.47^5)] = + (6.91^5 \times 5.39^5)$;
the result will be a new L-shaped layout
 - layout extension partially along front façade (next to entrance/corridor/bedroom),
 - corridor extension ($l = 2.30$, $w = 1.10$) & new entrance to corridor extension,
 - result : additional two bedrooms,
 - extension of foundation, façades & roof construction



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RUS 48 Standard Houses Shelter Programme 2006-2010



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“Box Tents” Temporary Shelter Programme 2002-2010

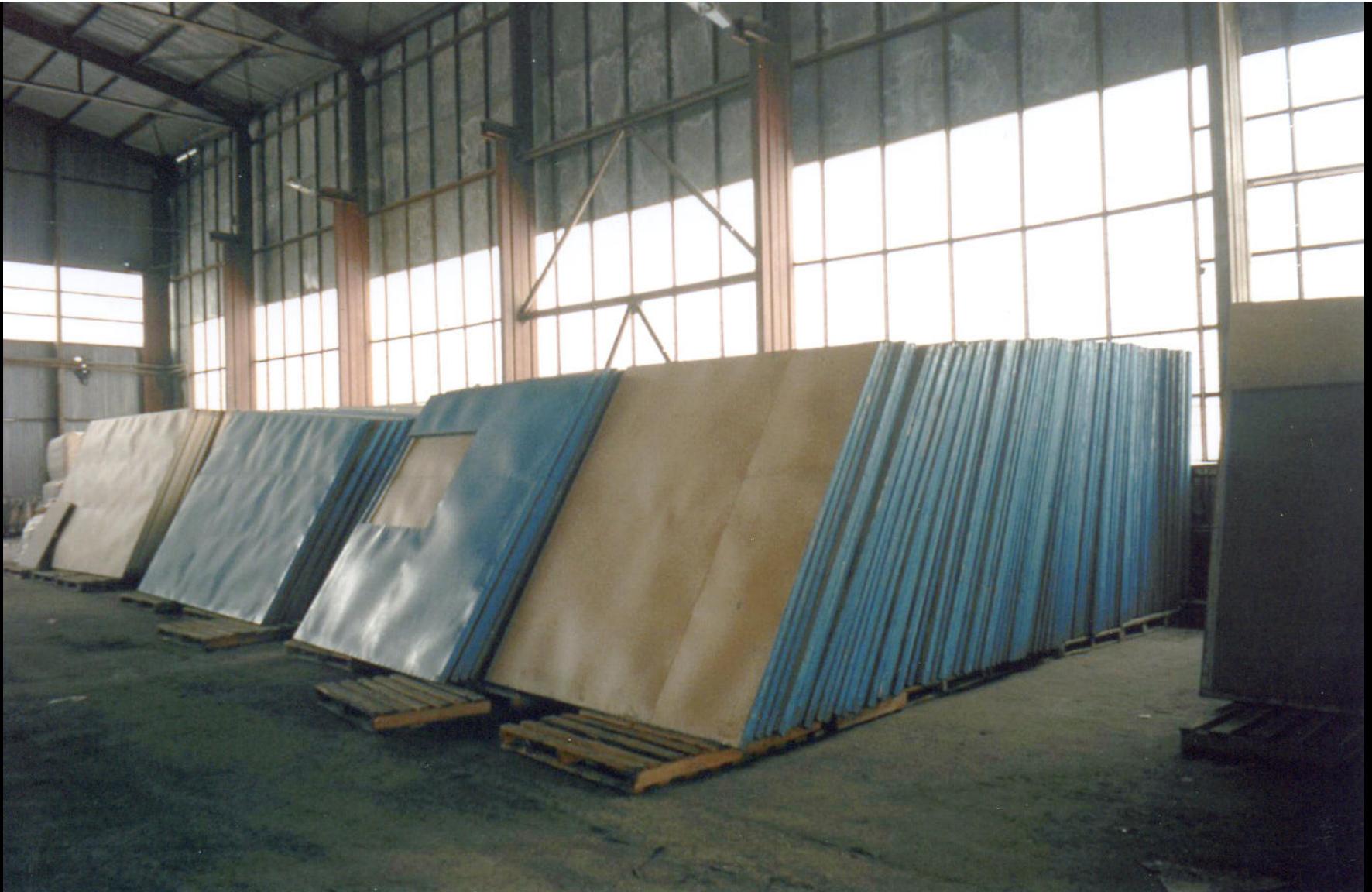


UNHCR Northern Caucasus
"Box Tents" Temporary Shelter Programme 2002-2010



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"Box Tents" Temporary Shelter Programme 2002-2010



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