

Type of Project:	Housing – DuSoCC Durable Solutions for Collective Centre Residents	Country:	BiH – Bosnia-Herzegovina	
Approach:	Individual Housing	Realisation - Year:	2002-2005	
Project Name:	DuSoCC BiH Standard Houses 6 types	Version:	3	Date: 06 December 2005

DuSoCC BiH Standard Houses Programme



Context – Situation in BiH

Ten years after the war ended, Bosnia-Herzegovina remains confronted with the problem of displaced persons (DPs). As of the end of December 2004, 309,240 persons were still displaced in the country. While the pace of returns has increased in recent years, many DPs continue to reside in Collective Centres (CCs) where they await durable solutions of their housing problems. These CCs provide, for the most part, only the most basic accommodation. Many are converted facilities such as former schoolhouses, closed hotels, barracks or housing containers.

Housing, the main objective of the DuSoCC Programme

The main objective of the “Durable Solutions for Collective Centre Residents” (DuSoCC) programme, a SHA secondment at UNHCR Sarajevo is to provide durable housing solutions for CC residents: creation of decent accommodation by reconstruction or rehabilitation of destroyed or damaged private houses (mostly in rural area) and social apartments (in urban area).

Approach – “tipske kuće” : 6 types of standardized individual houses

Confronted with numerous cases of completely destroyed potential rehab objects, the DuSoCC programme management developed 6 types of low-budget standard houses:

- type 1A (39 m² for 1–2 persons: small living room with kitchenette, 1 bedroom, small bathroom);
- type 1B (48 m² for 3–4 persons: living room with kitchenette, 1 bedroom, bathroom);
- type 2A (68 m² for 5–6 persons: large living room with kitchenette, 2 bedrooms, bathroom, pantry/larder);
- type 2B (70 m² for 5–6 persons: large living room with kitchenette, 2 bedrooms, bathroom);
- type 3 (88 m² for 7–8 persons: large living room with kitchenette, 3 bedrooms, bathroom, pantry);
- type 4 (2x58 m² for 9–12 persons: living room, kitchen/dining room, 4 bedrooms, bathroom, storeroom).

Implementation – Results

55 DuSoCC BiH standard houses have been realized in 2002/2004 (status as on 31 December 2004):

16 objects type 1A, 24 objects type 1B, 1 object type 2A, 6 objects type 2B, 3 objects type 3, 5 objects type 4

The pilot project of the DuSoCC BiH standard houses programme was a type 4 (2x58 m²) standard house, localized in Vogošća-Kamenica/Gora (Kanton Sarajevo), designed and implemented by DuSoCC Sarajevo for the SHA Field Office Knin funded Cross Border from Croatia to Bosnia-Herzegovina Return Project (CBP HR-BiH); the contractor in charge was “Sajting” d.o.o. Sarajevo – privredno društvo za projektovanje, inženjering i usluge, BiH-71000 Sarajevo, ulica Hadži Sulejmanova 2 (director Mr Mirza Hodžić).

Lessons learnt

- what was useful in the approach?
 - the proposed standardization rationalized and accelerated the construction procedure: fitting of standard component parts (joinery: windows, doors, sanitary facilities, kitchen equipment);
 - the proposed standardization facilitated the cost estimate, tender procedure and tender comparison;
 - the availability of six different sized types enabled us to develop tailor-made solutions.
- what should be done differently next time?
 - nothing - we're very satisfied with the results we achieved by this standardization approach.

Preconditions for this approach

Standard houses projects in urban context (in Vogošća town for example) require usually a special project approval: a detailed project documentation authorized by a local architect/engineer has to be submitted to the local building supervisory board.

Evaluation

Joint Evaluation-SHA/UNHCR of DuSoCC programme to BiH, 21 - 30 April 2002

Heinrich Gloor, Consultant, SHA/SDC, Bern & Melesse Tegegne, EESS/DOS, Geneva

EESS Mission Report 02/09

For further information

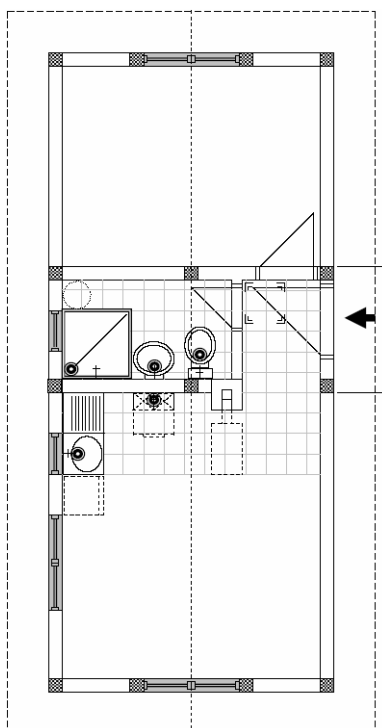
Recommended contacts:	René Edward Knupfer, SHA Seconded at UNHCR Vladikavkaz
Recommended institutions:	SHA Berne, Specialised Group for Construction (Heinrich Gloor)
Recommended books/reports:	DuSoCC-BiH Shelter Standards, PowerPoint presentation 08.11.'05
Relevant other projects (links):	--- (none)

Annex:

photos/plans/figures & project procedures flowchart



tipska kuća 39



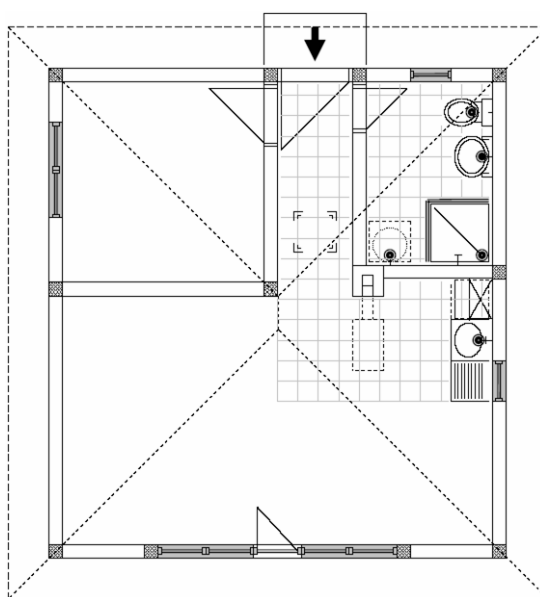
Budget – DuSoCC BiH standard house, type 1A, 39 m² (9.40 m x 4.20 m)

Total costs BAM 18,447 (07.08.2003) = EUR 9,432

tipska kuća 39 (tip 1A) 39m ² (9.40mx4.20m) BAM 18'447 (07.08.2003)	objects	rooms	persons	floorspace gross m ²	floorspace net m ²	volume gross m ³	volume net m ³
#	#	#	#				
unit [# , m ² , m ³]	1	2	2	39.48	32.54 = 82.4% of gross	183.58	81.36 = 44.3% of gross
costs per unit [EUR]	9'432	4'716	4'716	239	290	51	116



tipska kuća 48



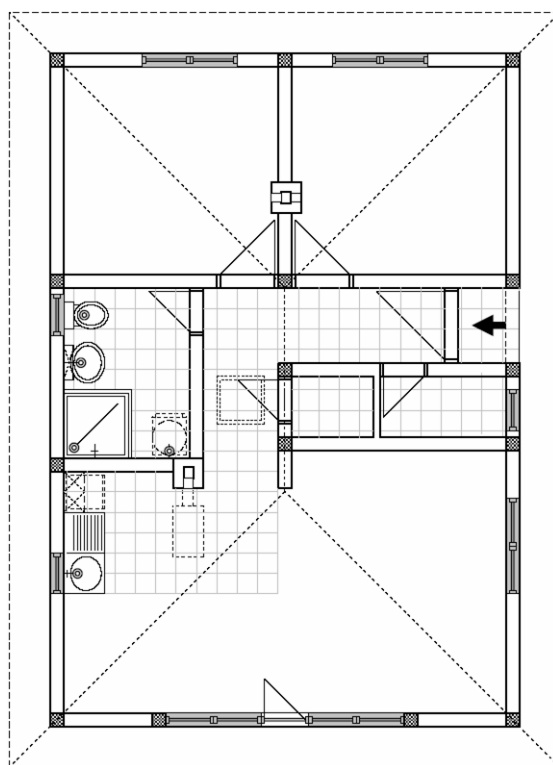
Budget – DuSoCC BiH standard house, type 1B, 48 m² (7.20 m x 6.70 m)

Total costs BAM 24,010 (02.03.2004) = EUR 12,276

tipska kuća 48 (tip 1B) 48m ² (7.20mx6.70m) BAM 24'010 (02.03.2004)	objects	rooms	persons	floorspace gross m ²	floorspace net m ²	volume gross m ³	volume net m ³
unit [#, m ² , m ³]	1	2	3	48.24	40.56 = 84.1% of gross	200.01	101.39 = 50.7% of gross
costs per unit [EUR]	12'276	6'138	4'092	254	303	61	121



tipska kuća 68



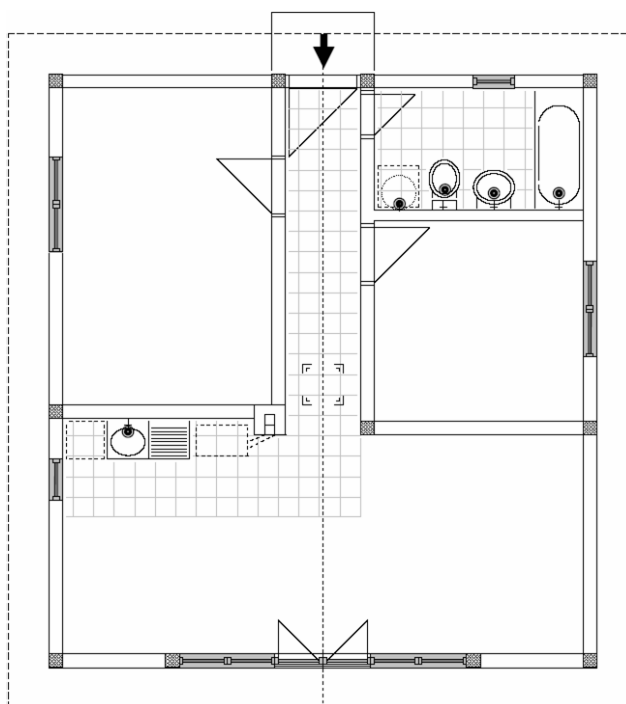
Budget – DuSoCC BiH standard house, type 2A, 68 m² (9.90 m x 6.90 m)

Total costs BAM 28,544 (26.10.2004) = EUR 14,594

tipska kuća 68 (tip 2A) 68m ² (9.90mx6.90m) BAM 28'544 (26.10.2004)	objects	rooms	persons	floorspace gross m ²	floorspace net m ²	volume gross m ³	volume net m ³
unit [# , m ² , m ³]	1	3	5	67.54	56.11 = 83.1% of gross	296.10	140.27 = 47.4% of gross
costs per unit [EUR]	14'594	4'865	2'919	216	260	49	104



tipska kuća 70

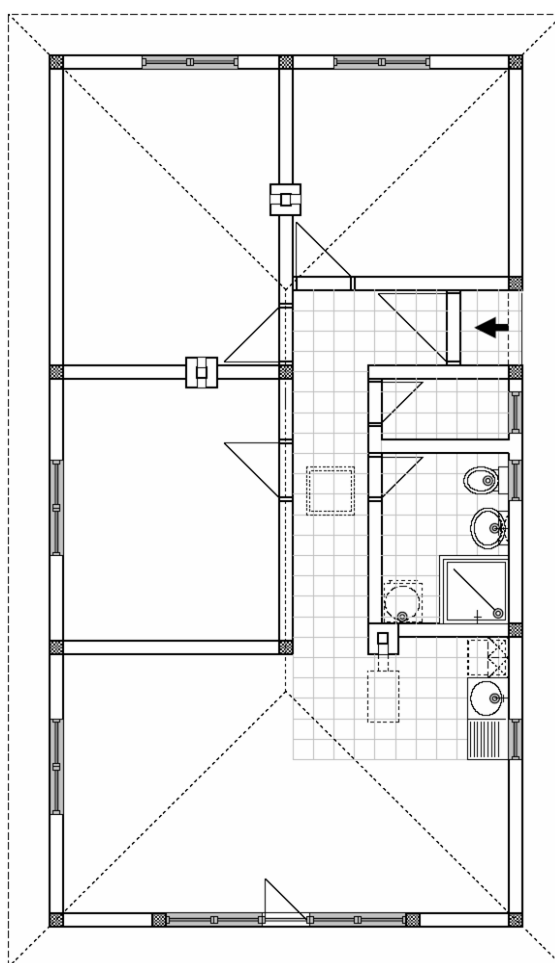
Budget – DuSoCC BiH standard house, type 2B, 70 m² (8.70 m x 8.00 m)

Total costs BAM 31,326 (02.12.2003) = EUR 16,017

tipska kuća 70 (tip 2B) 70m ² (8.70mx8.00m) BAM 31'326 (02.12.2003)	objects	rooms	persons	floorspace gross m ²	floorspace net m ²	volume gross m ³	volume net m ³
unit [# , m ² , m ³]	1	3	5	69.60	59.30 = 85.2% of gross	349.74	148.25 = 42.4% of gross
costs per unit [EUR]	16'017	5'339	3'203	230	270	46	108



tipska kuća 88



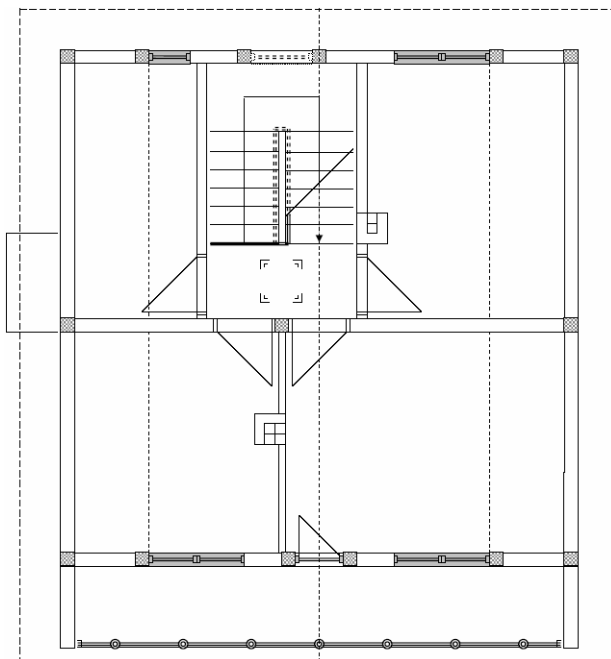
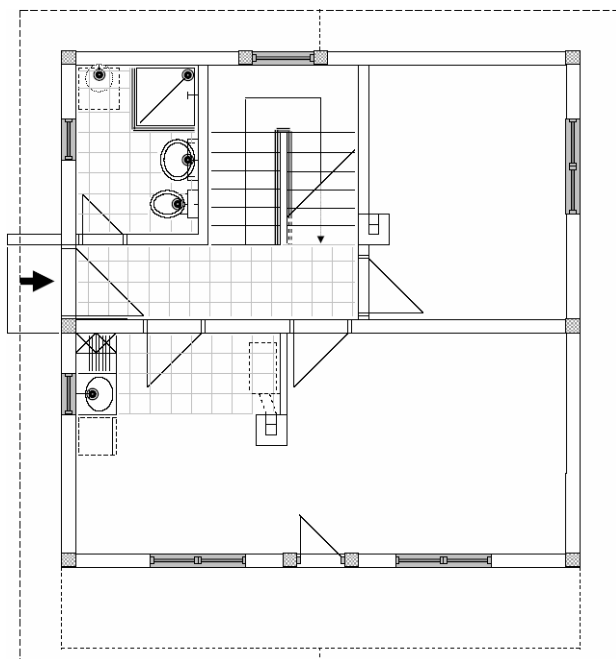
Budget – DuSoCC BiH standard house, type 3, 88 m² (12.80 m x 6.90 m)

Total costs BAM 41,703 (17.08.2004) = EUR 21,322

tipska kuća 88 (tip 3) 88m ² (12.80mx6.90m) BAM 41'703 (17.08.2004)	objects	rooms	persons	floorspace gross m ²	floorspace net m ²	volume gross m ³	volume net m ³
unit [# , m ² , m ³]	1	4	7	87.55	73.98 = 84.5% of gross	390.65	184.94 = 47.3% of gross
costs per unit [EUR]	21'322	5'331	3'046	244	288	55	115



tipska kuća 2x58

Budget – DuSoCC BiH standard house, type 4, 2x58 m² (2 x 7.60 m x 7.60 m)

Total costs BAM 44,139 (14.08.2002) = EUR 22,568

tipska kuća 2x58 (tip 4) 2x58m ² (2x7.60mx7.60m) BAM 44'139 (14.08.2002)	objects	rooms	persons	floorspace gross m ²	floorspace net m ²	volume gross m ³	volume net m ³
unit [# , m ² , m ³]	1	5	9	115.52	91.54 = 79.2% of gross	355.80	228.99 = 64.4% of gross
costs per unit [EUR]	22'568	4'514	2'508	195	247	63	99

DuSoCC BiH project preparation & implementation procedures flowchart