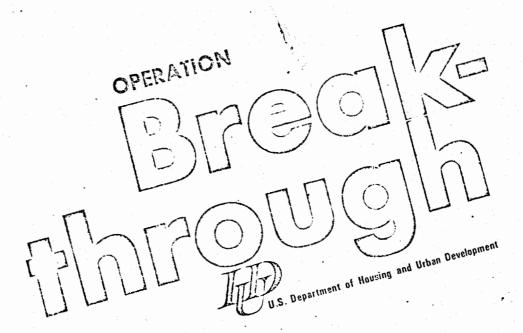
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GUIDE AND FORMAT FOR THE
PREPARATION OF A HOUSING SYSTEM
TESTING AND ANALYSIS PROGRAM
FOR
OPERATION BREAKTHROUGH
HOUSING SYSTEMS

A PRELIMINARY REPORT
VOLUME III - SINGLE FAMILY ATTACHED

NES REPORT 10213
4 VOLUMES
1 JUNE 1970

Guide and Format for the Preparation of a Mousing System Testing and Analysis Program

for:

OPERATION BREAKTHROUGH

HOUSING SYSTEMS

A Proliminary Report Volume III - Single Family Attached

> by The Building Research Division Team E.O. Pfrang, Manager

> > NBS PROJECT 4213400-421.00

Prepared for Office of Research and Technology Department of Housing and Urban Development Washington, D.C. 20410

U.S. DEPARTMENT OF COMMERCE NATIONAL BUREAU OF STANDARDS REPORT

Guide and Format for the Preparation of a Housing System Testing and Analysis Program

1. Introduction

The purpose of this document is to guide and assist the Housing System Producer (HSP) in his preparation of the required testing and analysis program. This program should indicate the procedures that will be used to demonstrate that the performance levels as stated in the HUD Guide Criteria* developed for Operation BPEAKTHROUGH will be satisfactorily met.

The information is to be submitted in three formats:

- A. TESTING AND ANALYSIS PLAN (See Section 4, Format for Testing and Analysis Plan, on page 3.)
- B. SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM (See Section 5, Summary of Testing and Analysis Program, on page 4.)
- C. SCHEDULE OF PHYSICAL TESTING (See Section 6, Schedule of Physical Testing, on page 6.)

The acceptability of each HSP's testing and analysis program will be determined by HUD from the above data and the program shall be revised by the HSP if required.

2. Scope of Testing and Analysis Program

A program for each proposed housing type requiring independent consideration (Multifamily High Rise, Multifamily Low Rise, Single Family Attached, or Single Family Detached) should be submitted. To expedite approval,

^{*(}Guide Criteria for Design and Evaluation of: Operation BREAKTHROUGH Housing Systems, Volumes I through IV.)

the testing and analysis program shall contain adequately documented and detailed information. It will not be sufficient to merely state that a physical test will be conducted. The testing and analysis program shall include specific information on the tests to be conducted, the test methods to be used, the components or modules to be selected for testing, etc. When documented evidence of previous testing is proposed for use in the HUD evaluation, information giving the source of the document, an outline of the testing and analysis procedure used, and the identity of the testing authority must be included.

Testing and analysis is not intended for the purpose of developing and/or improving the design of system components.

3. General Guidelines for the Testing and Analysis Program

Compliance with any criterion should be demonstrated by one or more of the following:

- A. Review of plans and specifications.
- B. Review of previous documented testing.
- C. Accepted certification or standards.
- D. Professional judgment based upon previously documented user-experience.
- E. Analysis by rational application of engineering and scientific principles including calculations as required.
- F. Physical examination or testing of materials, components, modules, living units or complete buildings.
- G. On-site evaluative measurement in or of complete buildings.

Most of the criteria can be satisfied through professional judgment based upon documented prior experience, examination of plans and specifications, and/or computational analysis. Physical testing should be proposed when sufficient information cannot be adequately obtained by other means; or when testing is a more acceptable means (time, cost, etc.) for demonstrating compliance with criteria.

Since environmental exposure will vary with geographic locale, design information on load levels such as snow, wind and thermal or earthquake severity, etc., should be given in detail. If the housing system is to be applicable for a wide range of conditions or is to be limited to specific geographic regions, statements to that effect should be made and evidence provided to clearly indicate that extreme load conditions either have or have not been taken into account.

4. Format for Testing and Analysis Plan

As part of the overall testing and analysis program, an individual testing and analysis plan shall be prepared by the HSP for each criterion which explains in detail how he plans to demonstrate that the intent of each criterion has been or will be satisfied (see Figure 1, SAMPLE TESTING AND ANALYSIS PLAN). As mentioned in Section 2, on page 1, and Section 3, on page 2, the information shall include the following when applicable:

- A. Identification or related drawings, plans and specifications.
- B. Type, number, style, size of specimen(s), etc.
- C. Test methods to be used including special conditions, testing organizations, etc.
- D. Evidence of conformance with recognized standards.
- E. Documentation attesting to previous applicable certification and/or testing.
- F. Calculation methods used and actual calculations.

- G. Documentation attesting to pertinent experience data.
- H. Other information relative to the particular criterion.

The testing and analysis plans shall be prepared on 8 1/2" x 11" or 8 1/2" x 14" sheets (leaving a margin of at least 1" on the left side) which shall be grouped by HUD Guide Criteria Matrix intercept (A.1, A.2, L.9. See Figure 2). Each intercept grouping should be annotated with the name of the HISP, the building type, and the number of abbreviated title of the criterion to which it relates as listed in the attached SUMMARY FORMS. The criterion numbers are those in the HUD Guide Criteria which should be consulted for details of each criterion.

5. Summary of Testing and Analysis Program

The summary listing of the proposed testing and analysis program to be prepared by the HSP will provide an overview of the various tasks and will permit scheduling of activities. Listing of criteria are provided on the attached SUNMARY FORMS which give criterion numbers and abbreviated performance statements. Figure 3 is a sample showing how this form can be completed. Information on this SUMMARY FORM is divided into two categories.

Category I, Evaluation of Plans and Specification and Documentation, includes those evaluations which are proposed to be made by either:

- A. Review of plans and specifications,
- B. Analysis by rational application of engineering and scientific principles, or
- C. Analysis of previous test results or approved Industry Certification.

Category II, Evaluation of Physical Elements, should include those evaluations which are proposed to be made by:

A. Professional judgment based on examination of components and/or assemblies, or

B. Physical testing and analysis of results.

Under the first column of Category I, Review of Plans and Specifications, a check mark will be sufficient. For the other columns of Category I and Category II the identity of the specimen(s) is needed. The specimen(s) should be identified by one of the following symbols:

Ma - for materials, II - housing unit, and

- component <u>IIs</u> - housing system.

M - module

Material is any single element such as surface coating for floor, wall, etc. Component is an assembly of elements such as: a mechanical system, composite wall panel, window assembly, etc. Module is a volumetric assembly having walls, ceiling and floor. Housing unit is an assembly of modules and/or components making up at least one complete living unit. Housing system is a complete structure errected on site.

Where the treatment of some criteria has been completed, the specimen(s) symbol should be circled.

There may be some criteria which will not be applicable for certain types of construction. In these cases mark "NA" as appropriate under Categories I and II.

6. Schedule of Physical Testing

If physical testing is proposed, a schedule shall be prepared and submitted to assure the adequate planning of this phase. This schedule shall follow the format outlined in Figure 4.

The test schedule shall include only tests or groups of tests which require a specimen to be specially procured or fabricated for the purpose of performing physical tests.

The test schedule prepared should be hardware oriented, by specimen. The schedule shall show by a dashed line the manufacturing or procurement lead-time for each specimen and the shipment of specimens to the test

facility. The total testing time required shall be shown by a solid line (including errection, instrumentation and test time) and the analysis time required after each test shall be shown by a dotted line. A particular specimen (module, component, etc.) may be used concurrently or in sequence to demonstrate adequacy with respect to more than one criterion. Scheduling should be by calendar week estimating start and completion dates. The overall schedule will be used to assure that the procurement of sufficient number of test specimens are contemplated for the performance of the required tests in the overall time frame of the program.

7. Recommended Testing Laboratories

For each test which must be conducted as shown on the SCHEDULE FOR PHYSICAL TESTING, Figure 4, the proposed testing laboratory along with alternate testing organizations should be identified. If consultants are used, the consultant, or consulting firm, along with alternates should be also identified.

In considering possible testing facilities, it should be noted that Federal laboratories with applicable capabilities are available and may be utilized in this program. Agreements have been reached, or are contemplated, making available the facilities of the National Bureau of Standards, Gaithersburg, Maryland, the Forest Products' Laboratory, Madison, Wisconsin, the Naval Civil Engineering laboratory, Port Hueneme, California, and the Army Construction Engineering Research Laboratory, Champaign, Illinois.

8. List of Required Submittals

As descibed in this document, three separate submittals comprising the proposed testing and analysis program are to be prepared:

- A. TESTING AND ANALYSIS PLANS; on 8 1/2" x 11" or 8 1/2" x 14" sheets, grouped by matrix intercept.
 - B. SUMMARY FORMS FOR TESTING AND ANALYSIS PROGRAM (one set for each building type).
- C. SCHEDULE OF PHYSICAL TESTING.

TESTING AND ANALYSIS PLAN

Housing System Producer XYZ Corporation

Building Type Multifamily High Rise

E.7.3.1 Air Infiltration through exterior Wall System

- 1. Propose to use window assembly (No. 24A), door assembly (No. 31C) and preformed panel wall system ('fodel No. 313).
- 2. Scale drawings and detailed specifications of test specimens will be furnished.
- 3. Test has been conducted at the "Universal Testing Laboratory", Tucson, Arizona. NAAMM Interim Standard TM-1-68T (4.3 Test for Air Infiltration) used. Door assembly not included in test. Test Report #24381, Universal Testing Laboratory, to be furnished.
- 4. Door assembly will be described by detailed drawings and will be tested at "ABC Testing Laboratories", Denver, Colorado, or other testing laboratory meeting your approval, using ASTM E-283 Test Method; or a door assembly having a previously certified performance level and satisfying the criteria will be used and appropriate documentation furnished.

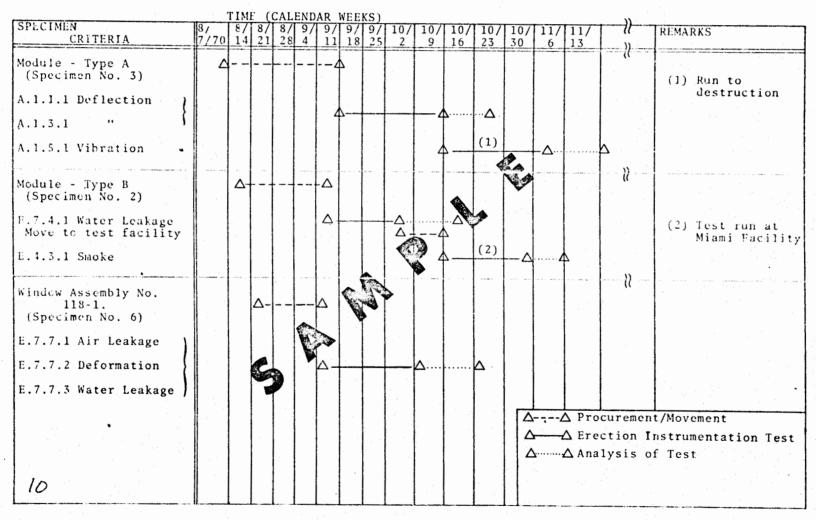
Figure 2

		PO4	M.M.				RIOR LOPE	IN	TERIOR S DIVIDER	S .				
ENCLOSED SPACES	LIGHTING	POWER, ELECTRICAL DISTRIBUTION, COMMUNICATIONS	MECHANICAL EQUIP- MENT, APPLIANCES	PLUMBING	FIXTURES AND HARDWARE	ROOF-CEILING, GROUND FLOOR	WALLS, DOORS AND WINDOWS	FLOOR- CEILING	AND DOORS, INTRA-DWELLING	AND DOORS, INTER-DWELLING	STRUCTURE	Elements	Built	
7	X	L		I	ି ଦ	5 79	FXI	a	n	C3	A	S		
				. :									STRUCTURAL SERVICEABILITY	
	1				·		-					N	STRUCTURAL SAFETY	
												ယ	HEALTH AND SAFETY	
									-			4	FIRE SAFETY	AII
												5	ACOUSTIC ENVIRONMENT	ttributes
												0	ILLUMINATED ENVIRONMENT	ites
												7	ATMOSPHERIC ENVIRONMENT	
												00	DURABILITY/TIME RELIABILITY (FUNCTION)	
عها												9	SPATIAL CHARACTERISTICS AND ARRANGEMENT	

Housing Sy: Building Ty Intercept:	Housing System Producer: XYZ Corporation Building Type: Single Family Attached (Guide Criteria Vol. III) Intercept:		Category I Evaluation of Plans & Specs. & Documentation		Category II Evaluation of Physical Elements		SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM Legend	
Criteria		Review of Plans (Spece	Computations/ Analysis	Test Data/ Industry Cert.	Examination	Testing to be Done	Ma -Material H -Housing Unit C -Component HS -Housing System M -Module	
Number	Subject	8 2	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	무트	<u> </u>	F a	Remarks	
A.1.1.1	Vertical deflection			<u> </u>				
(a)	Performance criteria (1D+1L+C)		ļ	М				
:			<u> </u>					
<u>:</u>			┵,					
D.4.3.1	Floor-ceiling-smoke generation		<u></u>	* _ *	<u> </u>			
		0	P _	1				
:		V A		ļ				
E.7.3.1	Air infiltration through wall system	P.	<u> </u>		<u> </u>		All tests documented except door infiltration	
				_	ļ			
				ļ				
F.8.1.1	Service life of roofing			(0)	С		Systems available for examination	
•					<u> </u>			
F.8.2.1	Water penetrations-resistance of r∞fing							
•								

>

SCHEDULE OF PHYSICAL TESTING



Housing Syst	em Producer:	C	ategor	y 1	Cate	gory II	SUMMARY FORM FOR		
Building Type	e: Single Family Attached (Guide Criteria Vol. III)		iluation		Evaluation of Physical		TESTING AND ANALYSIS PROGRAM		
Intercept: A.	1 Structure/Structural Serviceability		& Documentation		Elements		Legend		
			Computations/ Analysis	Analysis Test Data/ Industry Cert.	ation	۵ a	Ma - Material H - Housing Unit C - Component HS - Housing System M - Module - Completed (symbol circled)		
Criteria		Review of Plans/Specs.	nput		Examination	Testing to be Done			
Number	Subject **	Re, Pio	P Co	Tes	Ě	Tes be	Remarks		
A.1.1.1(a)	Structure/Vert. Deflect Performance Criteria								
(b)1	" " - floor (1D+1L)								
2	"	<u> </u>							
3	" - floor (1D+1D+creep)								
4	" - roof (1D+1L+creep)								
A.1.2.1	Structure/Drift (0.9D+1W)	<u> </u>							
A.1.2.2	Structure/Drift (1D+1L+0.8W)				<u></u>				
A.1.3.1(a)	Structure/Horiz, Deflect Performance Criteria								
(b)	" - Exterior Walls	<u> </u>		<u> </u>					
. 1	(0.9D+1W)								
2	(11)+1L+0.8W)								
(c)	Structure/Horiz. Deflect Interior Walls	1							
. 1	(1D+1L)								
2	(1D+5psf)								
A.1.4.1	Structure/Foundation Settlement (10+11)								
	A.1 Intercept continued on next page								

Building Typ	using System Producer: Ilding Type: Single Family Attached (Guide Criteria Vol. III) ercept: A.1 (Continued)		Category I Evaluation of Plans & Specs. & Documentation			gory II ation of sical nents	SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM Legend	
Criteria Number	Subject	Review of Plans/Specs.	Computations/ Analysis	Test Data/ Industry Cert.	Examination	Testing to be Done	Ma - Material H - Housing Unit C - Component HS - Housing System M - Module - Completed (symbol circled) Remarks	
A.1.5.1(a) (b)	Structure/Vibrations - Transient (251b x 3ft) " - Steady-state							
(c) A.1.6.1(a) (b)	" - Environmental Structural Elements/Local Damage - Vertical " " - Horizontal							
A.1.7.1	Structure/Expansion and Contraction Performance Criteria							
(b)	Deflections							

Housing Syst	em Producer:	Co	ategory	/ 1	Cate	gory II	SUMMARY FORM FOR		
	e: Single Family Attached (Guide Criteria Vol. III)	Plan	luation s & S;	oecs.	Evaluation of Physical		TESTING AND ANALYSIS PROGRAM		
Intercept: A.	2 Structure/Structural Safety	& Documentati		tation	Eler	nents	Legend		
			Computations/ Analysis	Test Data/ Industry Cert.	Examination		Ma -Material H -Housing Unit C -Component HS -Housing System M -Module -Completed		
Criteria		Review of Plans/Specs.	mputa alysis			Testing to be Done	(symbol circled)		
Number	Subject	S &	A C	Tes	Ě	Tes be	Remarks		
.2.1.1	Structure/Load Capacity								
(a)	1.4D+1.7L								
(b)	0.9D+1.3W				ļ				
(c)	0.9D+1.45E			·		<u> </u>			
(d)	1.1D+1.3L+1.3W				 	╂			
	1.1D+1.3L+1.45E					-			
(f)	0.9D+1.7Q	<u> </u>	 		 				
1.2.1.2	Structure/Effect of creep and inelastic deflections on load capacity								
.2.2.1	Structure/Load capacity under repeated loading								
(a)1	100 cycles: 1D to (1D+0.5L)								
2	1000 cycles: 1D to (1D+0.5W)				<u> </u>				
(b)	5 cycles: (1D+E) to (1D-E)		<u> </u>						
			-	ļ	<u> </u>				
			-						
	A.2 Intercept continued on next page								

Housing Syste	em Producer:		ategory			gory II	SUMMARY FORM FOR			
Building Type	single Family Attached (Guide Criteria Vol. III)	1	Evaluation of Plans & Specs. & Documentation			ation of	TESTING AND ANALYSIS PROGRAM			
	2 (Continued)					nents	Legend			
<u> </u>	- (continued)	Ž,	Computations/ Analysis	ert.	5		Ma-Material H -Housing Unit C -Component HS -Housing System M -Module			
Criteria	eria		nputa alysis	Test Data/ Industry Cert.	Examination	Testing to be Done	M -Module -Completed (symbol circled)			
Number	Subject	Review of Plans/Specs.	Å Ö	Tes Ind	Ä	Tes be	Remarks			
Λ,2,3.1	Structure/Sustained leading (1.2D+1.5L) for 24 hours	_								
(a)1	dv									
2	dh	•								
(b)1	dvr									
2	Dvr									
A.2.5.1	Structure/Effect of differential foundation settlement on load capacity	-								
A.2.6.1	Structure/Capacity of inserts and hangers									
	Ceilings	-	-							
(b)	Structural members	- -	 	┼─						
A.2.7.1	Capacity reduction by cutting for utilities		-	 	-					
			-	-						
			†		<u> </u>					

Housing Sys	stem Producer:		ategor			gory II	SUMMARY FORM FOR		
Building Ty	De: Single Family Attached (Guide Criteria Vol. III)		aluatio ns & S			ation of sical	TESTING AND ANALYSIS PROGRAM		
Intercept: A	.4 Structure/Fire Safety		& Documentation			nents	Legend		
		Review of Plans/Specs.	Computations/ Analysis	Cert.	io ro		Ma-Material H -Housing Unit C -Component HS -Housing System M -Module -Completed		
Criteria	Criteria		nputa alysis	Test Data/ Industry Cert.	Examination	Testing to be Done	(symbol circled)		
Number	Subject	Rev	A Co	Tes Ind	Ä	Tes	Remarks		
A.4.1.1	Structural Components - Fire Resistance								
A.4.1.2	" Connections - " "								
A.4.3.1	Sprayed fire protection								
						1			
			1						
•									

Housing Sys	tem Producer:	1	tegor			gory II	SUMMARY FORM FOR		
	oe: Single Family Attached (Guide Criteria Vol. III)		Evaluation of Plans & Specs.			ation of	TESTING AND ANALYSIS PROGRAM Legend		
Intercept: A	.5 Structure/Acoustic Environment	& Do	& Documentation		Elements				
,	Criteria		Computations/ Analysis	Test Data/ Industry Cert.	tion	lion o	Ma - Material H - Housing Unit C - Component HS - Housing System M - Module - Completed		
Criteria			npute	t Dat	Examination	Testing to be Done	(symbol circled)		
Number	Subject	Review of Plans/Specs.	A Co	Tes	Ex	Tes be	Remarks		
A.5.1.1	Structure borne noise								
						A 41			
						-			
				1	T				

Housing Sy	stem Producer:		ategor		Cate	gory II	SUMMARY FORM FOR		
Building Ty	pe: Single Family Attached (Guide Criteria Vol. III)	Evaluation of Plans & Specs. & Documentation			Evaluation of Physical Elements		TESTING AND ANALYSIS PROGRAM Legend		
	.8 Structure/Durability/Time Reliability (Function)	ecs.	hions/	Cert.	u _o		Ma - Material H - Housing Unit C - Component HS - Housing System M - Module - Completed		
Criteria		Review of Pans/Specs.	Computations Analysis	Test Data/ Industry Cert.	Examination	Testing to be Done	M -Module — Completed (symbol circled)		
Number	Subject	Rev Par	CSn	Test	Exa	Tes	Kemarks		
.8.1.1	Eliminate continuous voids								
.8.1.2	Provide adequate vapor barriers and ventilation	a no comit d'un appendient ser .							
.8.2.1	Structural/time reliability								
.8.3.1	Static and dynamic deflections								
				·					
•									
5									

Housing Syst	em Producer	C	ategon	1	Cate	gory II	SUMMARY FORM FOR		
Building Type		Plan	Evaluation of Plans & Specs. & Documentation			ation of sical	TESTING AND ANALYSIS PROGRAM Legend		
	Inter-Dwelling/Structural Serviceability	Review of Plans/Specs.	Computations/ Analysis	Test Data/ Industry Cert.	rion.		Ma - Material H - Housing Unit C - Component HS - Housing System M - Module - Completed		
Criteria	Criteria		nputc alysis	Date	Examination	Testing to be Done	(symbol circled)		
Number	Subject	Rev Plar	A Con	Test	Exa	pe Tes	Remarks		
в.1.1.1	Inter-dwelling walls/deflections - load supporting								
B.1.1.2	Inter-dwelling walls/deflections - non-load supporting								
B.1.2.1	Inter-dwelling walls/foundation settlement								
B.1.3.1	" " /local damage				<u> </u>				
(a)	150 lb anywhere								
(b)	200 lb 3in above floor			<u> </u>	<u> </u>				
(c)	10 psf		<u> </u>						
(d)	Attached shelves or 40 lb/ft at eccentricity of 6in + t/2	1-		-					
(e)	Impact								

Housing Syst	tem Producer:			Co	tegor	/ I	Categ	gory II	SUMMARY FORM FOR		
	e: Single Family At	tached (Guide Ci	riteria Vol. III)	•	luations & S			ation of	TESTING AND ANALYSIS PROGRAM		
	2 Interior Space				cumen		Physical Elements		Legend		
	Inter-Dwellin			e cs.	Computations/ Analysis	Test Data/ Industry Cert.	ion	•	Ma-Material H -Housing Unit C -Component HS-Housing System M -Module -Completed		
Criteria	Criteria		Review of Plans/Specs.	puta Ilysis	Date	Examination	Examination Testing to be Done	(symbol circled)			
Number	Subject			Rev	Con	Test	Exa	Test be i	Remarks		
B.2.1.1(a)	Inter-dwelling w	alls/load cap	acity - load								
(b)	Inter-dwelling w supporting	alls/load capa	acity - non-lo	ad							
	<u> </u>					_					
	· · ·										

Housing Sys	tem Producer:	<u> </u>	ategor		Cate	gory II	SUMMARY FORM FOR			
Building Typ	e: Single Family Attached (Guide Criteria Vol. III)	Plar	Evaluation of Plans & Specs. & Documentation		Evaluation of Physical Elements		TESTING AND ANALYSIS PROGRAM			
Intercept: B.	4 Interior Space Dividers, Walls and Doors,	& Do					Legend			
	Inter-Dwelling/Fire Safety	Review of Plans/Specs.	Computations/ Analysis	ert.	5		Ma - Material H - Housing Unit C - Component HS - Housing System			
Criteria	Criteria		mputa alysis	Test Data/ Industry Cert.	Examination	Testing to be Done	M -Module -Completed (symbol circled)			
Number	Subject	Rey Pla	δΨ	Tes	X	8 - e	Remarks			
B.4.1.1	Inter-dwelling walls - fire endurance									
B.4.1.2	" - no through openings					ļ.				
B.4.1.3	" " - service and utility openings									
B.4.1.4	Fire wall/roof line									
B.4.2.1	Inter-dwelling walls - flame spread									
B.4.3.1	" - smoke generation									
B.4.4.1	" - potential heat				ļ					
				<u> </u>						

Housing Syst	em Producer:	C	ategor	/ 1	Cate	gory II	SUMMARY FORM FOR	
Building Typ	uilding Type: Single Family Attached (Guide Criteria Vol. III) ntercept: B.5 Interior Space Dividers-Walls and Doors, Inter-Dwelling/Acoustic Environment		Evaluation of Plans & Specs. & Documentation			ation of sical nents	TESTING AND ANALYSIS PROGRAM Legend	
			Computations/ Analysis	Cert.	ioi		Ma - Material H - Housing Unit C - Component HS - Housing System M - Module - Completed	
Criteria		Review of Plans/Specs.	nputa	Test Data/ Industry Cert.	Examination	Testing to be Done	(symbol circled)	
Number	Subject	Rev	Con	Test	Exa	Test be I	Remarks	
B.5.1.1	Inter-dwelling walls - airborne noise							
B.5.1.2	" noise insulation between enclosed spaces	-						
		-						
					-			
			-	-		·		
					<u>† </u>			

Housing Syst	em Producer:		tegon		Cate	gory II	SUMMARY FORM FOR
Building Typ	e: Single Family Attached (Guide Criteria Vol. III)	Evaluation of Plans & Specs. & Documentation			Evaluation of Physical Elements		TESTING AND ANALYSIS PROGRAM Legend
Intercept: C.	1 Interior Space Dividers-Walls and Doors, Intra-Dwelling/Structural Serviceability						Ma -Material H -Housing Unit C -Component HS -Housing System
Criteria		Review of Plans/Specs.	Computations/ Analysis	Test Data/ Industry Cert.	Examination	Testing to be Done	M -Module -Completed (symbol circled)
Number	Subject	Rev	Con	Test	Exa	Test	Remarks
C.1.1.1	Intra-dwelling walls/deflections - load supporting						
C.1.1.2	Intra-dwelling walls/deflections - non-load supporting						
C.1.2.1	Intra-dwelling walls/foundation settlement						
C.1.3.1 (a)	" " /local damage						
(b)	200 1b 3in above floor	-					
	Attached shelves or 40 lb/ft at eccentricity of 6in + t/2				w.		
(e)	Impact				ļ		
The state of the s							

Housing Syst Building Type		Eva	Category I Evaluation of Plans & Specs.			gory II ation of sical	SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM
	2 Interior Space Dividers-Walls and Doors, Intra-Dwelling/Structural Safety	ļ	cumen			ments	Ma - Material H - Housing Unit
Criteria	Incla Dwelling, Sciuctural Safety	Review of Plans/Specs.	putatior ysis	Test Data/ Industry Cert.	Examination	Testing to be Done	C -Component HS -Housing System M -Module -Completed (symbol circled)
Number	Subject	Revi	Com	Test	Exan	Testi be D	Remarks
C.2.1.1(a)	Intra-dwelling walls/load capacity - load supporting						
(b)	Intra-dwelling walls/transfer of loads - non-load supporting						
					<u> </u>		
· · · · · · · · · · · · · · · · · · ·							
						•	

•							
		41 P					
Housing Sy	rstem Producer:		itegor		Cate	gory II	SUMMARY FORM FOR
Building Ty	· The state of the		luation			ation of vsical	TESTING AND ANALYSIS PROGRAM
Intercept: (C.4 Interior Space Dividers-Walls and Doors,		cumen			nents	Legend
_	Intra-Dwelling/Fire Safety	ڼ	/su	ti			Ma-Material H -Housing Unit C -Component HS -Housing System
Criteria		Review of Plans/Specs.	itatio is	Test Data/ Industry Cert.	Examination	و <u>و</u>	M -Module -Completed
		oview	ompu nalys	dustr	amir	Testing to be Done	(symbol circled)
Number	Subject	~ 5	υĕ	- E	ŭ	ا ق م	Remarks
C.4.1.1	Intra-dwelling walls - fire stops						
C.4.2.1	" - flame spread						
C.4.3.1	" " - smoke generation						
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Building Ty	ilding Type: Single Family Attached (Guide Criteria Vol. III) ercept: C.5 Interior Space Dividers-Walls and Doors,		Category 1 Evaluation of Plans & Specs. & Documentation			gory II ation of sical eents	SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM Legend
Criteria	Intra-Dwelling/Acoustic Environment	Review of Plans/Specs.	Computations/ Analysis	Test Data/ Industry Cert.	Examination	g to	Ma-Material H -Housing Unit C -Component HS -Housing System M -Module -Completed (symbol circled)
Number	Subject	Revie Plans	Comp	Test I indus	Exam	Testing to be Done	Remarks
C.5.1.1 C.5.1.2	Intra-dwelling walls - airborne noise " " noise isolation between enclosed spaces						
							-

Housing S	ystem Producer:		ategor		Cate	gory II	SUMMARY FORM FOR	
	Building Type: Single Family Attached (Guide Criteria Vol. III) Intercept: C.8 Interior Space Dividers-Walls and Doors, Intra-Dwelling/Durability/Time Reliability (Function)		Evaluation of Plans & Specs. & Documentation			ation of sical	TESTING AND ANALYSIS PROGRAM	
Intercept:						nents	Legend	
			Computations/ Analysis	Cert.	roi		Ma -Material H -Housing Unit C -Component HS -Housing System M -Module ()-Completed	
Criteria		Review of Plans/Specs.	nputa	Test Data/ Industry Cert.	Examination	Testing to be Done	(symbol circled)	
Number	Subject	Plar Plar	Con	Tesi	Exa	Test	Remarks	
C.8.1.1	Performance of the final finish							
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	ousing System Producer: oilding Type: Single Family Attached (Guide Criteria Vol. III)		Category I Evaluation of			gory II	SUMMARY FORM FOR
Building Type			Plans & Specs.		Evaluation of Physical		TESTING AND ANALYSIS PROGRAM
Intercept: D.	1 Interior Space Dividers-Floor-Ceiling/	& Do	cumen	tation	Elements		Legend
	Structural Serviceability	ecs.	Computations/ Analysis	1/ Cert.	ro		Ma-Material H -Housing Unit C -Component HS -Housing System M -Module — -Completed
Criteria		Review of Plans/Specs.	nputa alysis	Analysis Test Data/ Industry Cert.	Examination	Testing to be Done	(symbol circled)
Number	Subject	Rev Pla	P Co	Tes	Ex	Tes be	Remarks
D.1.1.1	Floor-ceiling assembly/deflections						
0.1.2.1	" . " /foundation settlement						
0.1.3.1(a)	Local damage/structural vibrations - floors						
(b)	" /steady-state vibrations - ceiling			2			
0.1.4.1	Local damage to floor-ceiling assembly						
(a)	750 ft-1b impact						
(b)	400 lb concentrated load						
(c)	Ceilings - 5D or 4 psf						
D.1.5.1	Local damage to protruding elements 500 lb						
	horizontally						
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Housing Sy	stem Producer:		ategor		Categ	jory II	SUMMARY FORM FOR		
	ercept: D.2 Interior Space Dividers-Floor-Ceiling/		Evaluation of Plans & Specs. & Documentation			ition of sical	TESTING AND ANALYSIS PROGRAM		
Intercept: I						ents	Legend		
	Structural Safety		Computations/ Analysis	er.	ion		Ma-Material H -Housing Unit C -Component HS -Housing System M -Module ()-Completed		
Criteria		Review of Plans/Specs.	nputa alysis	Test Data/ Industry Cert.	Examination	Testing to be Done	(symbol circled)		
Number	Subject	8. e.	A G	Tes	Ä	Tes be	Remarks		
D.2.1.1	Floor-ceiling/load capacity								
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Housing Sys	tem Producer:	C	ategor	y I	Cate	gory II	SUMMARY FORM FOR	
	Building Type: Single Family Attached (Guide Criteria Vol. III) Intercept: D.4 Interior Space Dividers-Floor-Ceiling/Fire Safety		Evaluation of Plans & Specs. & Documentation			ation of sical	TESTING AND ANALYSIS PROGRAM	
						nents	Legend	
***************************************			Computations/ Analysis	Cert.	u ci		Ma - Material H - Housing Unit C - Component HS - Housing System	
Criteria		Review of Plans/Specs.	nputa	Test Data/ Industry Cert.	Examination	Testing to be Done	M -Module -Completed (symbol circled)	
Number	Subject	Ple P	P Q	Tes	Ex	Tes	Remarks	
D.4.1.1	Floor-ceiling - fire endurance							
D.4.2.1	" - flame spread							
D.4.3.1	" - smoke generation	ļ			ļ			
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Building Ty	Housing System Producer: Building Type: Single Family Attached (Guide Criteria Vol. III) Intercept: D.5 Interior Space Dividers-Floor-Ceiling/		Category I Evaluation of Plans & Specs. & Documentation			gory !! ation of vsical nents	SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM Legend	
Criteria	Acoustic Environment	Review of Plans/Specs.	Computations/ Analysis	Test Data/ Industry Cert.	Examination	Testing to be Done	Ma-Material H -Housing Unit C -Component HS -Housing System M -Module -Completed (symbol circled)	
Number .	Subject	Rev	Con	Test	Exa	Test be	Remarks	
D.5.1.1	Floor-ceiling assembly/airborne noise and impact							
D.5.1.2	Inter-dwelling noise isolation and impact insulation between enclosed spaces							
D.S.2.1	Floor-ceiling assembly/sound transmission and impact insulation							
D.5.2.2	Multi-level dwelling/noise isolation and impact insulation							

Housing Sy	stem Producer:		ategor		Cate	gory II	SUMMARY FORM FOR		
	ercept: D.8 Interior Space Dividers-Floor-Ceiling/ Durability/Time Reliability (Function)		Plans & Specs.			ation of sical	TESTING AND ANALYSIS PROGRAM Legend		
Intercept:			Review of Plans/Specs. Computations/ Analysis Test Data/ Industry Cert. Examination Testing to			Ma - Material H - Housing Unit C - Component HS - Housing System			
Criteria		Review of Plans/Specs.	nputat alysis	Test Data/ Industry Cert.	Examination	Testing to be Done	M -Module -Completed (symbol circled)		
Number :	Subject	Plar	Con	Test	Exo	Tesl	Remarks		
D.8.1.1	Flooring, dry areas - dimensional stability								
D.8.1.2	". " - indentation			<u> </u>	ļ				
D.8.1.3	" " - bond to substrate								
D.8.1.4	" " - service life								
D.8.2.1	" wet areas - dimensional stability		<u> </u>						
D.8.2.2	" - indentation								
D.8.2.3	" " - bond to substrate	·			<u> </u>				
D.8.2.4	" - water penetration		<u> </u>		ļ				
D.8.2.5	" " resistance to chemicals								
D.8.2.6	" " - wear life			<u> </u>		ļ			
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Building Type	ousing System Producer: uilding Type: Single Family Attached (Guide Criteria Vol. III)		Category I Evaluation of Plans & Specs. & Documentation			gory !I ution of sical	SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM Legend
intercept: E.	1 Exterior Envelope-Walls, Doors and Windows/Structural Serviceability		<u> </u>		-	lements	Ma - Material H - Housing Unit C - Component HS - Housing System
Criteria	ķ.	Review of Plans/Specs.	Computations, Analysis	Test Data/ Industry Cert.	Examination	Testing to be Done	M -Module -Completed (symbol circled)
Number	Subject	Re	A C	Tes Ind	Exc	Tes	Remarks
E.1.1.1	Exterior wall/local damage						
E.1.2.1	" envelope/horizontal deflections						
E.1.3.1	" /foundation settelment						
E.1.4.1	Width and movements of joints						
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Housing System Producer: Building Type: Single Family Attached (Guide Criteria Vol. III) Intercept: E.2 Exterior Envelope-Walls, Doors and Windows/Structural Safety Criteria		Category I Evaluation of Plans & Specs. & Documentation		Category II Evaluation of Physical Elements		SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM Legend	
		Review of Plans/Specs.	Computations/ Analysis	t Data/ ustry Cert.	Examination	Testing to be Done	Ma-Material H -Housing Unit C -Component HS -Housing System M -Module -Completed (symbol circled)
Number	Subject	Rey	Cor Ang Tes	Tes	Exo	Tes be	Remarks
E.2.1.1(a) (b)	Exterior wall/load capacity - load supporting " " - non-load supporting				well-knowled and she' do.	The second secon	
(c)	Attachment of veneer (5D vertically + 3D horizontally)			-			
And the second s							
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Housing System Producer: Building Type: Single Family Attached (Guide Criteria Vol. III) Intercept: E.4 Exterior Envelope-Walls, Door and			Category I Evaluation of Plans & Specs. & Documentation			gory II otion of rsical nents	SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM Legend		
	Windows/Fire Safety	of pecs.	Computations/ Analysis	ta/ Cert.	ation	٠ .	Ma-Material H -Housing Unit C -Component HS -Housing System M -Module)-Completed		
Criteria Number	Subject	Review of Plans/Specs.	Compu	Test Data/ Industry Cert.	Examination	Testing to be Done	(symbol circled) Remarks		
E.4.1.1					<u> </u>				
5.4.2.1	Exterior walls - fire resistance								
.4.3.1									
	- Smoke generation		-						
3.4.5.1	" - floor-wall joint		 						
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Housing Sy	stem Producer:	С	ategor	y I	Cate	gory II	SUMMARY FORM FOR		
Building Ty			aluatio ns & S			ation of	TESTING AND ANALYSIS PROGRAM		
Intercept: E	.5 Exterior Envelope-Walls, Doors and		& Documentat			nents	Legend		
	Windows/Acoustic Environment				Computations/ Analysis	Cert.	ē	Examination Testing to be Done	Ma-Material H -Housing Unit C -Component H5 -Housing System M -Module — -Completed
Criteria		Review of Plans/Specs.	nputa	Analysis Test Data/ Industry Cert.	minat	(symbol circled)			
Number	Subject	Rev	Con	Test	Exa	Test be l	Remarks		
E.5.1.1	Exterior envelope noise attenuation					Tag is an investigated			
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Housing Sv	stem Producer:	Co	ategory	/ 1	Cate	gory il	SUMMARY FORM FOR		
	pe: Single Family Attached (Guide Criteria Vol. III)		Evaluation of Plans & Specs. & Documentation		Evaluation of Physical Elements		TESTING AND ANALYSIS PROGRAM		
	E.7 Exterior Envelope-Walls, Doors and						Legend Ma -Material H -Housing Unit		
	Windows/Atmospheric Environment	ecs.	tions/	ert.	Examination	Examination Testing to be Done	C -Component HS -Housing System M -Module -Completed		
Criteria		Review of Plans/Specs.	Computations/ Analysis	Test Data/ Industry Cert.			(symbol circled)		
Number	Subject	Rev	P Q	Tes	Ex	Tes	Remarks		
E.7.1.1	Exterior wall winter heat loss								
E.7.1.2	Winter total heat loss through windows								
E.7.1.3	Exterior wall summer heat gain								
E.7.1.4	Heat transmission through exposed ceilings								
E.7.1.5	Crawl space plenum heat lose								
E.7.2.1	Provisions for thermal breaks								
E.7.3.1	Air infiltration through exterior wall system								
E.7.4.1	No water leakage through exterior wall system								
E.7.5.1	" " below grade								
	foundation								
E.7.6.1	Warm side vapor barrier								
E.7.6.2	" " for low permeance								
	exterior								
E.7.7.1	Window air leakage								
	Intercept E.7 continued on next page								

Housing System Producer: Building Type: Single Family Attached (Guide Criteria Vol. III) Intercept: E.7 (Continued)		Eve Plar	Category I Evaluation of Plans & Specs. & Documentation			gory !! ation of sical nents	SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM Legend
Criteria			Computations/ Analysis	Test Data/ Industry Cert.	Examination	Testing to be Done	Ma-Material H -Housing Unit C -Component HS -Housing System M -Module — Completed (symbol circled)
Number	Subject	Review of Plans/Specs.	Con	Test	Exa	Test be	Remarks
E.7.7.2	No damage to window assembly from design windload						
E.7.7.3	No water leakage through window assembly						
E.7.7.4	Acoustic requirements for window assembly						
E.7.7.5	Window hardware						
E.7.7.6	Sizes of windows						
E.7.8.1	Door assembly air leakage						
E.7.8.2	No water leakage through door assembly	<u>: </u>	<u> </u>				
E.7.8.3	Acoustic requirement for door assembly				L		
E.7.8.4	Durability of doors						
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Housing Syst	tem Producer:	Co	itegory	/ 1	Cate	gory II	SUMMARY FORM FOR		
	e: Single Family Attached (Guide Criteria Vol. III)	Evaluation of Plans & Specs.				ation of			
	8 Exterior Envelope-Walls, Doors and			tation	Physical Elements		Legend		
	Windows/Durability/Time Reliability (Function)	ecs.	Computations/ Analysis	Cert.	noi		Ma-Material H-Housing Unit C-Component HS-Housing System M-Module		
Criteria		Review of Plans/Specs.	nputa Itysis	Test Data/ Industry Cert.	Examination	Testing to be Done	(symbol circled)		
Number	Subject	Rev	Con	Test	Exa	Test be	Remarks		
E.8.1.1	Effective life of sealants		TO THE OWNER OF THE OWNER						
E.8.2.1	Performance and renewability of finish of exterior walls, doors and windows								
E.8.2.2	Protection of exterior metal								
E.8.2.3	" " masonry	<u> </u>							
E.8.3.1	Distortion of exterior cladding	<u> </u>				<u> </u>			
E.8.4.1	Thermal movement of exterior walls, doors and windows	-							
E.8.5.1	Exterior door warpage								
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Building Ty	dousing System Producer: Suilding Type: Single Family Attached (Guide Criteria Vol. III) Intercept: F.1 Exterior Envelope-Roof-Ceiling, Ground Floor/Structural Serviceability			of of oecs.	Evalue Phy	gory II ation of sical	SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM
Intercept: p				tation		ents	Legend Ma-Material H -Housing Unit C -Component HS -Housing System
Criteria		Review of Plans/Specs.	putatie lysis	Test Data/ Industry Cert.	Examination	Testing to be Done	M -Module -Completed (symbol circled)
Number	Subject	Revi	Com	Test Inde	Exa	Test be C	Remarks
F.1.1.1	Roof - vertical deflection		Marian Policy States	graved Simulaying Sir.		The state of the s	agamangan kanamanahan na maray man a sa mara n ng para nami sake piloming sa sake na mga mga mga mga kana Tangan mga
F.1.2.1	" - vibrations						
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Housing Syst	em Producer:	C	ategor	, 1	Cate	gory II	SUMMARY FORM FOR
Building Typ	e: Single Family Attached (Guide Criteria Vol. III) 2 Exterior Envelope-Roof-Ceiling, Ground	Evaluation of Plans & Specs. & Documentation			Evaluation of Physical Elements		TESTING AND ANALYSIS PROGRAM Legend
<u>F.</u>	Floor/Structural Safety	Review of Plans/Spacs. Computations/Analysis		Cert.			Ma - Material H - Housing Unit C - Component HS - Housing System M - Module - Co. npleted
Criteria		Review of Plans/Specs.	nputa Ilysis	Test Data/ Industry Cert.	Examination	Examination Testing to be Done	(symbol circled)
Number	Subject	Rev Plar	Co	Test Ind	Exa	Test be l	Remarks
F.2.1.1(a)	Roof/load capacity - load supporting structure						
(b)	" " - non-load supporting						
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Housing System Producer: Building Type: Single Family Attached (Guide Criteria Vol. III) Intercept: F.4 Exterior Envelope-Roof-Ceiling, Ground		Category I Evaluation of Plans & Specs. & Documentation		Category II Evaluation of Physical Elements		SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM Legend	
Criteria	Floor/Fire Safety	Review of Plans/Specs.	Computations/ Analysis	Test Data/ Industry Cert.	Examination	Testing to be Done	Ma-Material H -Housing Unit C -Component HS -Housing System M -Module -Completed (symbol circled)
Number -	Subject	Revi	Com	Test	Exa	Test be [Remarks
F.4.3.1	Roof-ceiling - flame spread						
F.4.4.1	" - roofing class						
F.4.5.1	" - smoke generation						
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Building Ty	Housing System Producer: Building Type: Single Family Attached (Guide Criteria Vol. III) Intercept: F.7 Exterior Envelope-Roof-Ceiling, Ground		Category I Evaluation of Plans & Specs. & Documentation			gory !! ation of sical nents	SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM Legend	
Criteria	Floor/Atmospheric Environment	Review of Plans/Specs.	Computations/ Analysis	Test Data/ Industry Cert.	Examination	ig to one	Ma-Material H -Housing Unit C -Component HS -Housing System M -Module — Completed (symbol circled)	
Number	Subject	Revie Plans	Comp	Test I	Exam	Testing to be Done	Remarks	
F.7.1.1	Flat roof deck construction/moisture or wetting damage							
F.7.2.1	Flat roof construction/condensed moisture damage							
F.7.3.1	Attic space ventilation							
F.7.4.1	Heat transmission through exposed ceiling							
F.7.5.1	Vapor barrier under concrete slab-on-grade							
F.7.6.1	Crawl space ventilation							
F.7.6.2	Ground cover in crawl space							
F.7.7.1	lleat loss through floors over unheated spaces		ļ	<u> </u>	 			
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	System Producer:			y I n of		gory II ation of	SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM	
Building Type	oilding Type: Single Family Attached (Guide Criteria Vol. III) otercept: F.8 Exterior Envelope-Roof-Ceiling, Ground Floor/Durability/Time Reliability (Function)				Phy	rsical nents	Legend	
					ion		Ma-Material H -Housing Unit C -Component HS -Housing System M -Module -Completed	
Criteria		Review of Plans/Specs.	Computations/ Analysis	Test Data/ Industry Cert.	Examination	Testing to be Done	(symbol circled)	
Number	Subject	Rev	Cor	Tes	Exa	Tes be	Remarks	
F.8.1.1	Roofing - service life							
F.8.2.1	" - water penetration resistance							
F.8.3.1	" - wind load "							
F.8.4.1	" - impact "							
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Housing Syst	g System Producer:			1	ategor		Cate	gory II	SUMMARY FORM FOR	
Building Typ	Building Type: Single Family Attached (Guide Criteria Vol. III) Intercept: F.9 Exterior Envelope-Roof-Ceiling, Ground				Evaluation of Plans & Specs. & Documentatio			ation of sical nents	TESTING AND ANALYSIS PROGRAM Legend	
***************************************	. Floor/Spatial Characteristics and Arrangements		cs and	a S	Computations/ Analysis	ert.	ion		Ma-Material H -Housing Unit C -Component HS -Housing System M -Module -Completed	
Criteria				Review of Plans/Specs.	nputa alysis	Test Data/ Industry Cert.	Examination	Testing to be Done	(symbol circled)	
Number ·	Subject			Rev Pla	A Co.	Tes	Exa	Tes	Remarks	
F.9.1.1	Access opening	to attic spaces								
F.9.1.2	11 11	" crawl "								
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Housing Syst	em Producer:	С	ategor	y I	Cate	gory II	SUMMARY FORM FOR	
	ntercept: G.1 Fixtures and Hardware/Structural Serviceability		Evaluation of Plans & Specs. & Documentation			ation of sical	TESTING AND ANALYSIS PROGRAM Legend	
Intercept: G.			T.			ents	Ma - Material H - Housing Unit	
Criteria	Serviceability	Review of Plans/Specs.	Computations/ Analysis	Test Data/ Industry Cert.	Examination	Testing to be Done	C -Component HS -Housing System M -Module -Completed (symbol circled)	
Number	Subject	Revie	Com	Test	Exam	Testin be D	Remarks	
.1.1.1	Fixtures - compatibility with deflections							
(a)	Vertical deflection							
(b)	Drift						The state of the s	
(c)	Horizontal deflection							
(d)	Settlement							
G.1.2.1	Local damage to fixture							
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Housing Syst	em Producer:				tegory			ory II	SUMMARY FORM FOR	
Building Typ	e: Single Family Attach	ed (Guide Criteria V	ol. III)		luations s & Sp		Evalue Phy	ntion of	TESTING AND ANALYSIS PROGRAM	
Intercept: G.	ntercept: G.2 Fixtures and Hardware/Structural Safety				cumentation		Elements		Legend	
					ions/	ert.	u o		Ma - Material H - Housing Unit C - Component HS - Housing System	
Criteria				Review of Plans/Specs.	Computations/ Analysis	Test Data/ Industry Cert.	Examination	Testing to be Done	M -Module -Completed (symbol circled)	
Number	Subject	·.		Rev Pla	A C	Tes	Ě	Tes be	Remarks	
G.2.1.1	Capacity of fixture	s to transmit loa	d							
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Building Typ	using System Producer: Iding Type: Single Family Attached (Guide Criteria Vol. III) ercept: G.5 Fixtures and Hardware/Acoustic Environment		Category 1 Evaluation of Plans & Specs. & Documentation			Category II Evaluation of Physical Elements		SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM Legend	
Criteria				Computations/ Analysis	Test Data/ Industry Cert.	Examination	ig to one	Ma - Material H - Housing Unit C - Component HS - Housing System M - Module - Completed (symbol circled)	
Number	Subject		Review of Plans/Specs.	Comp	Test I	Exam	Testing to be Done	Remarks	
G.5.1.1	Fixtures and hardware/noise genetransmitted	rated and							

Building Ty	ousing System Producer: uilding Type: Single Family Attached (Guide Criteria Vol. III) ntercept: G.8 Fixtures and Hardware/Durability/Time			Category I Evaluation of Plans & Specs. & Documentation			SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM Legend	
Criteria Number	Reliability (Function)		Computations/ Analysis	Test Data/ Industry Cert.	Examination	Examination Testing to be Done	Ma-Material H -Housing Unit C -Component HS -Housing System M -Module -Completed (symbol circled) Remarks	
G.8.1.1	Performance of hardware							
G.8.2.1	Mail boxes and/or slots	<u> </u>						
G.8.2.2 G.8.3.1	" " and slots/Post Office requirements Door bells	-						
		 						
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Housing Syst	em Producer:	Co	ategor	y I	Cate	gory II	SUMMARY FORM FOR
Building Type	Single Family Attached (Guide Criteria Vol. III)	Plan	luations & S	pecs.	Phy	ation of sical	TESTING AND ANALYSIS PROGRAM Legend
Criteria	l Plumbing/Structural Serviceability	Review of Plans/Specs.	5	t t	Examination		Ma - Material H - Housing Unit C - Component HS - Housing System M - Module - Completed (symbol circled)
Number	Subject	Reviev Plans/	Computa Analysis	Test Data/ Industry Ce	Exami	Testing to be Done	Remarks
H.1.1.1(a)	Plumbing system - vertical deflections						
(b)	" - horizontal drift						
(c)	" - " deflection						
(d)	" - foundation settlement				<u> </u>		
H.1.2.1	Plumbing system vibration						
H.1.3.1(a)	Limit angular rotation of horizontal lines						
(b)	" " vertical lines		13. 3				
(c)	Loads not to impair proper function						
(d)	No loss of stability or tightness	,		<u> </u>			
H.1.3.2(a)	Fixture rims and supports to carry load				<u> </u>		
(b)	Center loading of sump				<u> </u>		

Building Typ	Housing System Producer: Building Type: Single Family Attached (Guide Criteria Vol. III) Intercept: H.2 Plumbing/Structural Safety Criteria		Category I Evaluation of Plans & Specs. & Documentation			gory II ation of vsical ments	SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM Legend	
Criteria			nputations/ alysis	Test Data/ Industry Cert.	Examination	Examination Testing to be Done	Ma-Material H -Housing Unit C -Component HS -Housing System M -Module -Completed (symbol circled)	
Number	Subject	Review of Plans/Specs.	P Co.	Tes	Š	Tes	Remarks	
Н.2.1.1	Hangers, supports and inserts not to fail							
H.2.2.1	Structural safety not to be impaired							
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	sing System Producer: ding Type: Single Family Attached (Guide Criteria Vol. III)		ategor aluations & S	n of	Evalue	gory II	SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM
Intercept: II.	3 Plumbing/Health and Safety	& Do	cumen	tation	,	nents	Legend Ma -Material H -Housing Unit
		Review of Plans/Specs.	Computations/ Analysis	Test Data/ Industry Cert.	afion.	ا ۵	C -Component HS -Housing System M -Module -Completed
Criteria		iew ns/S	nput alysis	t Da	Examination	Testing to be Done	(symbol circled)
Number	Subject	Rev Pla	Cor	Tes	Exa	Tes be	Remarks
Н.3.1.1	Minimum fixtures required						
Н.3.1.2	Floor drains or equivalent						
H.3.2.1(a)	Roughed in DWV leak test (static)	<u> </u>					
(b)	Finished DWV leak test (static)	<u> </u>	<u> </u>				
(c)	" " (dynamic)	ļ			ļ		
(d)	Interior storm-drainage system watertightness						
(e)	Water supply system watertightness						
(f)	Safe pans and shower drains watertightness						
H.3.3.1(a)	Hot water system - supply to fixtures			<u> </u>			
(b)	" " - capacity and safety			<u> </u>			
(c)	Hot water temperature	1					
H.3.4.1(a)	Hot water system safety devices						
i i	Intercept H.3 continued on next page						

Housing Syste	em Producer:	Co	ategor	<i>,</i> 1	Cate	gory II	SUMMARY FORM FOR		
	Single Family Attached (Guide Criteria Vol. III)		Evaluation of Plans & Specs.			ation of	TESTING AND ANALYSIS PROGRAM		
	Gontinued)		cumen		Physical Elements		Legend		
	Contract	S.	ions/	/ ert.	uo.		Ma - Material H - Housing Unit C - Component HS - Housing System		
Criteria		Review of Plans/Specs.	Computations/ Analysis	Test Data/ Industry Cert.	Examination	Testing to be Done	M -Module -Completed (symbol circled)		
Number	Subject	Rev	Con	Test Ind	Exa	Test be [Remarks		
H.3.4.1(b)1	Pressure relief valve in c-w supply								
2	Location of T and T-P relief valves								
3	Prohibited devices between relief valve and heater								
4	Location of energy shutoff devices								
	Adequate but not excessive water usage								
	Limit discharge rate at water outlets								
Н.3.6.1	Separation between potable and non-potable water supply systems								
Н.3.6.2	Air gap at water outlet								
H.3.6.3	Devices for preventing backflow								
H.3.6.4	Non-toxic materials in water supply system								
	Avoid threaded fixture faucets and submergible connectors								
		-			-				
	Intercept H.3 continued on next page								

Housing Syst	tem Producer:	Co	ategory	/ I	Cate	gory II	SUMMARY FORM FOR
Building Typ	e: Single Family Attached (Guide Criteria Vol. III) 3 (Continued)	Plan	luation is & Sp cumen	oecs.	Phy	ation of sical nents	TESTING AND ANALYSIS PROGRAM Legend
Criteria	S (Continued)	Review of Plans/Specs.	Computations/ Analysis	Test Data/ Industry Cert.		Testing to be Done	Ma -Material H -Housing Unit C -Component HS -Housing System M -Module -Completed (symbol circled)
Number	Subject	Rev Plar	Con	Test	Exa	Test be i	Remarks
11.3.7.1	Control of vermin and rodents						
H.3.8.1(a)	Prevent emission of unsafe or unsanitary fluids						
(b)	Pneumatic pressures in DWV system						
(c)	Vent terminals - location and closure						
(d)	Area of vent terminals						
(e)	Vents to be pitched						
(f)	Avoid connections to suds zones						
H.3.9.1(a)	Capacity of drainage stacks						
(b)	Horizontal drains - flow velocity and capacity						
(c)	Interfixture hydraulic effects						
(d)	Design loads for DWV systems						
(e)	Backwater protection						
(f)	Indirect connections of equipment containing sterile materials						
(g)	Sub-sewer drainage						
	Intercept H.3 continued on next page						

Housing Syste	em Producer:	Ce	tegon	/ I	Cate	gory II	SUMMARY FORM FOR
	Single Family Attached (Guide Criteria Vol. III)	Plan	luation is & S _l	pecs.	Evaluation of Physical Elements		TESTING AND ANALYSIS PROGRAM
Intercept: H.	3 (Continued)	& Do	cumen	tation			Legend
		ecs.	tions/	Cert.	roi		Ma - Material H - Housing Unit C - Component HS - Housing System M - Module - Completed
Criteria		Review of Plans/Specs.	Computations/ Analysis	Test Data/ Industry Cert.	Examination	Testing to be Done	M -Module -Completed (symbol circled)
Number	Subject	Se Pe	3 E	Tes	Ě	Tes	Remarks
H.3.9.1(h)	Sub-soil drainage						
H.3.10.1(a)	Adequate discharge rates at water outlets						
(b)	Maximum water pressure and water hammer				ļ		
(c)	Water system to be designed for the available pressure						
н.3.11.1	Storm water removal by "instantaneous" or "controlled" flow						
	"controlled" flow			·			
Н.3.11.2	Prevent storm drainage into sanitary sewer, or vice-versa	-					
					 	 -	
H.3.11.3	Trap rain pipes and floor drains to combination systems						
H.3.11.4	Size combination storm-sanitary system as storm						
	systems						
н.3.11.5	Prevent sewer backwater		-		·		
				<u> </u>			
		<u> </u>					

Housing Sv:	item Producer:	C	ategor	y i	Cate	gory II	SUMMARY FORM FOR		
Building Ty			aluatio ns & S			ation of ysical	TESTING AND ANALYSIS PROGRAM		
	.4 Plumbing/Fire Safety	1	& Documentation			ysical ments	Legend		
			hions /	ert.	uo		Ma -Material H -Housing Unit C -Component HS -Housing System M -Module -Completed		
Criteria		Review of Plans/Specs.	Computations/ Analysis	Test Data/ Industry Cert.	Examination	Testing to be Done	(symbol circled)		
Number	Subject	Rev	Con	Test	Exa	lest be [Remarks		
H.4.1.1	Plumbing not to contribute to fire spread								
H.4.1.2	Minimize fire spread through plumbing system								
H.4.1.3	Fire rating of partitions having plumbing								
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	e: Single Family Attache	d (Guida Critaria Val	111/	Eve	ategon aluatio	n of		gory II	SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM	
	5 Plumbing/Acoustic E		107		Plans & Specs. & Documentation			sical nents	Legend	
			-	Review of Plans/Specs.	Computations/ Analysis	Analysis Test Data/ Industry Cert.	Examination	۵ م	Ma - Material H - Housing Unit C - Component HS - Housing System M - Module - Completed	
Criteria				view Ins/S	mpu	st Da Iustry	iE	Testing to be Done	(symbol circled)	
Number	Subject			8 5	ီ န်	Te:	Ě	Te. be	Remarks	
H.5.1.1(a)	Plumbing - NC require	ment								
(b)	" - noise redu									
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Housing Sy	stem Producer:		legon			gory II	SUMMARY FORM FOR		
Building Ty	pe: Single Family Attached (Guide Criteria Vol. III)		Evaluation of Plans & Specs. & Documentation			ation of sical	TESTING AND ANALYSIS PROGRAM		
Intercept:	1.7 Plumbing/Atmospheric Environment					nents	Legend		
			tions/	Test Data/ Industry Cert.	E		Ma-Material H -Housing Unit C -Component HS -Housing System M -Module		
Criteria		Review of Plans/Specs.	nputa Ilysis	Date Jerry	Examination	Testing to be Done	(symbol circled)		
Number	Subject •	Rey	O Puc	Test	Exa	Test be	Remarks		
H.7.1.1	Prevent condensation on plumbing								
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Housing Syst	tem Producer:		ategor		Cate	gory II	SUMMARY FORM FOR		
Building Typ	e: Single Family Attached (Guide Criteria Vol. !!!)		luation			ation of	TESTING AND ANALYSIS PROGRAM		
Intercept: II.	8 Plumbing/Durability/Time Reliability	& Do	cumer	tation	Elements		Legend		
	(Function)		ions/	a/ Cert.	no		Ma-Material H -Housing Unit C -Component HS-Housing System		
Criteria		Review of Plans/Specs.	Computations, Analysis	Test Data/ Industry Ce	Examination	Testing to be Done	M -Module -Completed (symbol circled)		
Number	Subject	Rev Plan	Con	Test	Exa	Test be I	Remarks		
11.8.1.1	Plumbing life expectancy								
H.8.2.1(a)	Quality of materials and equipment	ļ							
(b)	Acceptability of standard and non-standard materials and equipment				·				
H.8.3.1	Quality of design and installation								
H.3.4.1	Self-scouring velocities in horizontal drains								
H.8.4.2	Access for cleaning drains								
H.8.4.3	Functional surfaces - cleanability and soilability	-							
H.8.4.4(a)	Slope of drain lines								
(b)	Avoid elements that retard flow			<u> </u>	<u> </u>				
(c)	Crossflow of waste water prohibited								
(d)	Maximum length of trap arms								
(e)	Avoid chilling of drain lines					ļ.			
and the second s									
	Intercept II.8 continued on next page								

Building Typ	tem Producer: e: Single Family Attached (Guide Criteria Vol. III)	Eva	itegory luation is & Sp cumen	of pecs.	Evalu Phy	gory II ation of vsical nents	SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM Legend
Criteria	8 (Continued)	Review of Plans/Specs.	5		l	Testing to be Done	Ma-Material H -Housing Unit C -Component HS -Housing System M -Module -Completed (symbol circled)
Number	Subject	Rev	Con	Test	Ex	Test	Remarks
H.8.4.4(f)	Bases of submergible vents washed by small fixtures						
(g)	Minimum sizes of dry vents below flood level						
(h)	Washing of vents to horizontal drains						
(i)	Geometrical aspects of fittings in drainage system design	-					
(j)	Vent grading (pitch)						
II.8.4.5(a)	Shutoff of building water supply outside building						
(b)	Interior building water supply shutoff						
(c)	Water tank shutoff				<u> -</u>		
(d)	Shutoff of each WC						
(e)	Water heating equipment shutoff						
(f)	Shutoff devices - hydraulic characteristics						
(g)	Draining of water supply system						
	Intercept H.8 continued on next page						

Building Typ	tem Producer: De: Single Family Attached (Guide Criteria Vol. III) 8 (Continued)	Eva	ategon luation is & Sp cumen	n of	Evalue Phy	gory II ation of rsical	SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM Legend
Criteria .	o (continued)	Review of Plans/Specs.	Computations/ Analysis	Test Data/ Industry Cert.	Examination	Testing to be Done	Ma-Material H -Housing Unit C -Component HS -Housing System M -Module -Completed (symbol circled)
Number	Subject	ᇂ풉	ů ě	اع ج	Ϋ́	P _e	Remarks
H.8.4.5(h)	Access for inspection and servicing						
11.8.4.6	Pressure control of pump supplies						
11.8.4.7	Metering of water supply						
H.8.4.8	Sill faucets				ļ		
н.8.5.1	Freeze protection			ļ			
Н.8.6.1	External corrosion protection - piping						
H.8.6.2	Internal " - "						
11.8.6.3	" - equipment			<u> </u>	ļ		
Н.8.6.4	Staining by water supply			ļ	ļ		
Н.8.6.5	Minimize electrolysis and particulate deposition						
H.8.6.6	Maximum water pipe velocities						

Housing Sy	stem Producer:	C	ategor	/ 1	Cate	gory II		SUMMAR	Y FORM FOR	
	pe: Single Family Attached (Guide Criteria Vol. III)		aluation		L	ation of sical	TESTING	AND ANALYSI	S PROGRAM	
	.1 Mechanical Equipment, Appliances/Structural		cumen			nents		Legend		
	Serviceability	oecs.	Computations/ Analysis	Test Data/ Industry Cert.	tion	0	Ma -Material C -Component M -Module	C -Component HS -Housing System		
Criteria		Review of Plans/Specs.	npute	Dat	Examination	Testing to be Done		(symbol circled)		
Number	Subject	Rev	Con	Tes	Exa	Yes	Re	emarks		
I.1,1,1	Mechanical equipment to accommodate structure deflection				,			A STATE OF THE STA		
I.1.2.1	Vibrations caused by mechanical equipment									
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Building Ty	g System Producer: g Type: Single Family Attached (Guide Criteria Vol. III) pt: 1.2 Mechanical Equipment, Appliances/Structural		Evaluation of Evaluation Plans & Specs. Ph & Documentation Ele		Evalue Phy Elen	gory II ation of rsical nents	SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM Legend
Criteria	Safety	Review of Plans/Specs.	nputations/ alysis	Test Data/ Industry Cert.	Examination	Testing to be Done	Ma - Material H - Housing Unit C - Component HS - Housing System M - Module - Completed (symbol circled)
Number	Subject	Rev	Con	Test	Exa	Test be	Remarks
1.2.1.1	Structural failure caused by mechanical equipment/failure of inserts and hangers						
1.2.2.1	Structural failure caused by installation of mechanical equipment						
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Building Ty	lousing System Producer: uilding Type: Single Family Attached (Guide Criteria Vol. III) ntercept: I.3 Mechanical Equipment, Appliances/Health and		Evaluation of Eva Plans & Specs. P		Evalue Phy	gory II ation of sical nents	SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM Legend
Criteria	Safety	Review of Plans/Specs.	Computations/ Analysis	Test Data/ Industry Cert.	Examination	Testing to be Done	Ma-Material H -Housing Unit C -Component HS -Housing System M -Module -Completed (symbol circled)
Number	Subject	Re.	P C	Tes	Ä	Tes	Remarks
1.3.1.1	Heating and cooling system - conformance to recognized safety standards						
1.3.1.2	Guarding of operating equipment						
1.3.1.3	Marking of exposed connections	<u> </u>			<u> </u>		
1.3.1.4	Protection from hot pipes	 		<u> </u>	<u> </u>		
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Housing Sv	stem Producer:	C	tegor	/ I	Cate	gory II	SUMMARY FORM FOR		
	pe: Single Family Attached (Guide Criteria Vol. III)	Plan	luation is & S	ecs.		ation of sical	TESTING AND ANALYSIS PROGRAM		
Intercept: I	.4 Mechanical Equipment, Appliances/Fire Safety	& Do	cumen	tation	Elen	nents	Legend		
		ecs.	Computations/ Analysis	Test Data/ Industry Cert.	fion	0	Ma -Material H -Housing Unit C -Component HS -Housing System M -Module -Completed		
Criteria		Review of Plans/Specs.	Computat Analysis	t Dat	Examination	Testing to be Done	(symbol circled)		
Number	Subject	Rey	Con	Test	Exa	Test	Remarks		
I.4.1.1	No ducts in inter-dwelling walls								
1.4.2.1	Unapproved location of heating equipment								
1.4.3.1	Heating unit clearance requirements								
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							and the state of t		

	em Producer: Single Family Attached (Guide Criteria Vol. III) Mechanical Equipment, Appliances/Acoustic	Evo Plar	luation s & Sp cumen	of oecs.	Evalue Phy	gory II ation of sical nents	SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM Legend
Criteria E	nvironment	Review of Plans/Specs.	Computations/ Analysis	Test Data/ Industry Cert.	Examination	Testing to be Done	Ma-Material H -Housing Unit C -Component HS -Housing System M -Module -Completed (symbol circled)
Number	Subject	Re. Pla	o 4	Tes	Ä	be je	Remarks
1.5.1.1(a)	Mechanical equipment/NC requirement						
(b)	" /noise reduction						
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Building Ty	stem Producer: pe: Single Family Attached (Guide Criteria Vol. III) .6 Mechanical Equipment, Appliances/Illuminate	- Evo		n of pecs. Itation	Evalue Phy Elen	gory II ation of sical nents	SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM Legend
Criteria	Environment	Review of Plans/Specs.	mputations/ alysis	Test Data/ Industry Cert.	Examination	Testing to be Done	Ma-Material H -Housing Unit C -Component HS -Housing System . M -Module
Number	Subject	8 5	\$ S	no T	ă	ي <u>د</u>	Remarks
1.6.1.1	Lighting of equipment rooms						
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Housing Syst	tem Producer:	Co	legory	1	Cate	gory II	SUMMARY FORM FOR
-	e: Single Family Attached (Guide Criteria Vol. III)		luation			stion of	TESTING AND ANALYSIS PROGRAM
Intercept: I.	7 Mechanical Equipment, Appliances/Atmospheric		cumen			ients	Legend
	Environment	ecs.	fions /	s/ . Cert.	ion		Ma - Material H - Housing Unit C - Component HS - Housing System M - Module - Completed
Criteria		Review of Plans/Specs.	Computations Analysis	Test Data/ Industry Cert.	Examination	Testing to be Done	(symbol circled)
Number	Subject •	Rev	Con	Test	Exc	Tes be	Remarks
I.7.1.1	Provide heating and/or cooling						
I.7.1.2(a)	Capacity to maintain 75 degrees F						
(b)	Automatic control						
(c)	Temperature and velocity variation						
(d)	Relative humidity control		,				
(e)	Air filtration						
(f)	Duct leakage						
1.7.2.1	Prevent condensate on a/c supply duct				<u> </u>		
1.7.3.1	Control humidity in high humidity areas	<u> </u>					
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	em Producer: e: Single Family Attached (Guide Criteria Vol. III) 8 Mechanical Equipment, Appliances/Durability/	Eva	luation s & Sp cumen	n of	Evalue Phy	gory II ation of rsical nents	SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM Legend
Criteria	Time Reliability (Function)	Review of Plans/Specs.	Computations/ Analysis	Test Data/ Industry Cert.	Examination	Testing to be Done	Ma-Material H -Housing Unit C -Component HS -Housing System M -Module — Completed (symbol circled)
Number	Subject	Revie	Com	Test	Exan	Testii be D	Remarks
I.8.1.1	Duct performance requirements	n i de de de la companya de la comp					
1.8.1.2	Damage to adjacent elements caused by ducts						
1.8.2.1	HVAC - reliable operation	<u> </u>					
1.8.2.2	" - ease of maintenance					<u> </u>	
1.8.4.1(a)	Range/oven - capacity and function	<u> </u>					
(b)	" - safety						
(c)	" - durability and maintainability						
(4)	" - appearance	<u> </u>		<u> </u>		<u> </u>	
I.8.5.1(a)	Refrigerator - capacity and function			<u> </u>	<u> </u>		
(b)	" - safety	<u> </u>					
· (c)	" - durability and maintainability	ļ			<u> </u>		
(d)	" - appearance	<u> </u>					
(e)	" - noise and vibration				ļ		
1.8.7.1	Mechanical equipment - function and adequacy						
1.8.7.2	" - safety						
	Intercept I.8 continued on next page						

Building Typ	em Producer: e: Single Family Attache 8 (Continued)	d (Guide Criteria Vol. I	ii)	Eve		n of pecs. tation	Evalue Phy	gory II ation of sical nents	SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM Legend
Criteria				Review of Plans/Specs.	Computations/ Analysis	Test Data/ Industry Cert.	Examination	Testing to be Done	Ma - Material H - Housing Unit C - Component HS - Housing System M - Module - Completed (symbol circled)
Number	Subject	enteren erroren errore		Revi	Com	Test indu	Exan	Testi be D	Remarks
I.8.7.3	Mechanical equipment	- air pollution							
1.8.7.4	11	- noise and vibrat	ion						
I.8.7.5	i .	- structural servi		-					
1.8.7.6	Mechanical equipment reliability	- durability and							
1.8.7.7	Mechanical equipment	- maintainability							
1.8.8.1	Chimneys and vents								
1.8.8.2	Fireplaces								
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Plans Docu	Computations/ n % of the Analysis and d of the documents	ecs.	Examination Phys Elem	ents	SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM Legend Ma -Material H -Housing Unit C -Component HS -Housing System
Docu	ument	ation	Elem	ents	Ma -Material H -Housing Unit
Plans/Specs.	omputations/ Analysis	t Data/ ustry Cert.	ation		
Plans/Spe	omputal Analysis	t Data	ŧ	_	
2	ا بِي ق		ä.	Testing to be Done	M -Module -Completed (symbol circled)
	0 4	Tes	Exa	Tes be	Remarks
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Building Ty	pe: Single Family Attached (Guide Criteria Vol. III) 1.2 Power, Electrical Distribution,	Eve Pla:	ategor alvation ns & Sp ocumen	n of pecs.	Evalue Phy	gory II ation of sical nents	SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM Legend
Criteria	Communications/Structural Safety	Review of Plans/Specs.	Computations/ Analysis	Test Data/ Industry Cert.	Examination	Testing to be Done	Ma - Material H - Housing Unit C - Component HS - Housing System M - Module - Completed (symbol circled)
Number	Subject	Pe Re	A Co	Tes Ind	EX.	řes be	Remarks
1.2.1.1	Power elements - effect on structural safety						
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Housing Sy	rstem Producer:	L	ategor		Cate	gory II	SUMMARY FORM FOR
Building Ty	pe: Single Family Attached (Guide Criteria Vol. III)		iluation			ation of sical	TESTING AND ANALYSIS PROGRAM
Intercept:	J.4 Power, Electrical Distribution,			tation		nents	Legend
	Communications/Fire Safety	ecs.	tions/	Cert.	ion		Ma - Material H - Housing Unit C - Component HS - Housing System M - Module - Completed
Criteria		Review of Plans/Specs.	Computations Analysis	Test Data/ industry Cert.	Examination	Testing to be Done	(symbol circled)
Number	Subject	Rev	S A	Test	Exa	Test be (Remarks
J.4.1.1	Conduit and outlets						
J.4.1.2	Recessed electric cabinets						
J.4.2.1	Automatic smoke detection device						
J.4.2.2	Continuous sounding alarm devices						
J.4.4.1	Lightening protection						
		-					

Housing Syst	em Producer:	C	ategory	/ 1	Cate	gory II	SUMMARY FORM FOR
Building Typ			luation			ation of	TESTING AND ANALYSIS PROGRAM
Intercept: J.	5 Power, Electrical Distribution,			ntation Elements			Legend
	Communications/Acoustic Environment	368.	Computations/ Analysis	ert.	noi		Ma - Material H - Housing Unit C - Component HS - Housing System
Criteria		Review of Plans/Specs.	nputa Ilysis	Test Data/ Industry Cert.	Examination	Testing to be Done	M -Module -Completed (symbol circled)
Number	Subject	Rev	Con	Test	Exa	Test be (Remarks
J.5.1.1(a)	Power, electrical distribution and						
	communications - NC requirements						
(b)	Power, electrical distribution and						
	communications - noise reduction						
							-
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Housing Sys	tem Producer:	C	ategor	/ 1	Cate	gory II	SUMMARY FORM FOR	
Building Typ	Building Type: Single Family Attached (Guide Criteria Vol. III) Intercept: J.8 Power, Electrical Distribution,		Evaluation of Plans & Specs. & Documentation			ation of vsical ments	TESTING AND ANALYSIS PROGRAM Legend	
	Communications/Durability/Time Reliability (Function)	Review of Plans/Specs.	Computations/ Analysis	Test Data/ Industry Cert.	o		Ma - Material H - Housing Unit C - Component HS - Housing System M - Module - Completed	
Criteria		iew o	npute alysis	Dat Ustry	Examination	Testing to be Done	(symbol circled)	
Number	Subject	Rev	Con	Test Indu	Exa	Test be 1	Remarks	
J.8.1.1	Main breaker capacity							
7.8.1.2	" - conformance to N.E.C.							
J.8.2.1(a)	Power characteristics							
(b)	Electrical distribution system -							
	Characteristics				<u> </u>			
(c)	Electrical distribution system - capacity							
(d)	" - safety							
(e)	" - durability							
J.8.4.1	Telephone wiring							
J.8.4.2	" - compatibility with local							
	company				4.			
J.8.6.1	Master TV signal distribution							
J.8.6.2	" - capacity							
J.8.6.3	" - construction							
J.8.6.4	" " durability		<u></u> .					
						100		

Housing Sy	stem Producer:	L	tegor			gory II	SUMMARY FORM FOR		
	pe: Single Family Attached (Guide Criteria Vol. III) C.1 Lighting Elements/Structural Serviceability	Evaluation of Plans & Specs. & Documentation Eleme			Phy		TESTING AND ANALYSIS PROGRAM Legend		
		Review of Plans/Specs.	Computations/ Analysis	Test Data/ Industry Cert.	tion	0 .	Ma-Material H -Housing Unit C -Component HS -Housing System M -Module -Completed		
Criteria		iew ns/Sp	nput	t Dat	Examination	Testing to be Done	(symbol circled)		
Number	Subject	Rev Pla	Cor	Tes	Ä	Tes be	Remarks		
K.1.1.1	Lighting elements - ceiling damage								
					<u>.</u>				
				1 1					

Housing Sy	stem Producer:		ategor			gory II	SUMMARY FORM FOR
	pe: Single Family Attached (Guide Criteria Vol. III) .2 Lighting Elements/Structural Safety	Plan	luation is & Sp cumen	oecs.	Phy	ation of sical nents	TESTING AND ANALYSIS PROGRAM Legend
		Review of Plans/Specs.	Computations/ Analysis	Test Data/ Industry Cert.	tion	•	Ma-Material H -Housing Unit C -Component HS -Housing System M -Module -Completed
Criteria		riew ons/Sp	apute alysis	t Dat ustry	Examination	Testing to be Done	(symbol circled)
Number	Subject	P. P.	Co	Tes	×	Tes be	Remarks
K.2.1.1	Lighting elements - strength of connections			Tope and Liverage Co.	A STATE OF THE PARTY OF THE PAR		
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Housing Sv	stem Producer:		ategor	·	Cate	gory II	SUMMARY FORM FOR		
	ype: Single Family Attached (Guide Criteria Vol. III)		aluatio ns & S		Evaluation of Physical		TESTING AND ANALYSIS PROGRAM		
Intercept: K	.4 Lighting Elements/Fire Safety			tation		nents	Legend		
		ecs.	Computations/ Analysis	cert.	ion		Ma-Material H -Housing Unit C -Component HS -Housing System M -Module ()-Completed		
Criteria		Review of Plans/Specs.	nputa	Test Data/ Industry Cert.	Examination	Testing to be Done	(symbol circled)		
Number	Subject	Rev	Con	Tes	Exo	Tes	Remarks		
K.4.1.1	Lightening Fixtures - fire hazard								
K.4.2.1	" - flame spread		<u> </u>		Andreado Atalah Militari da Mariana				
K.4.3.1	" - smoke generation		<u> </u>						
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em Producer:	C	ategory	/ 1	Cate	gory il	SUMMARY FORM FOR
Single Family Attached (Guide Criteria Vol. III)	Plan	ns & S	oecs.	Phy	rsical —	TESTING AND ANALYSIS PROGRAM Legend
5 Lighting Elements/Acoustic Environment			Ι			Ma -Material H -Housing Unit C -Component HS -Housing System
	iew of	nputat	Data	minati	ing to Done	M -Module Completed (symbol circled)
Subject	Re Po	Con	Tes	Exa	Test	Remarks
Lighting clement/NC requirement						
" /noise reduction	_					
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	Subject Lighting clement/NC requirement " " /noise reduction	Subject Lighting element/NC requirement " 'noise reduction For Plan & Do Subject Lighting element/NC requirement " 'noise reduction	Subject Subject Lighting element/NC requirement " " /noise reduction Fivaluation Plans & St & Document Subject Lighting element/NC requirement " " /noise reduction	Subject Subject Lighting clement/NC requirement " 'noise reduction Figure 8 Specs. & Documentation Subject Lighting clement/NC requirement " 'noise reduction Figure 8 Specs. & Documentation Foods 1 in 1 i	Single Family Attached (Guide Criteria Vol. III) 5 Lighting Elements/Acoustic Environment Subject Lighting element/NC requirement "" /noise reduction Fealuation of Plans & Specs. & Documentation Following Specs. & Documentation Following Specs. & Documentation Figure 1	Single Family Attached (Guide Criteria Vol. III) 5 Lighting Elements/Acoustic Environment Subject Lighting clement/NC requirement " /noise reduction " /noise reduction Evaluation of Plans & Specs. & Documentation Foodystrol Tool (Subject) Foody strong to a great of the plans of the

Housing Syste	em Producer:		L	tegory		Cate	gory II	SUMMARY FORM FOR
Building Type	e: Single Family Attached (Guide Criteria Vol. III) 6 Lighting Elements/Illuminated Environme		Plan	iluation is & Sp icumen	oecs.	Phy	ation of rsical ments	TESTING AND ANALYSIS PROGRAM Legend
Criteria	S Zighting Liements, illustrated Environme	ent_	Review of Plans/Specs.	Cemputations/ Analysis	Test Data/ Industry Cert.	Examination	g to	Ma-Material H -Housing Unit C -Component HS -Housing System M -Module -Completed (symbol circled)
Number	Subject		Revier Plans,	Cemp Analy	Test [Exam	Testing to be Done	Remarks
K.6.1.1(a)	Lighting elements - minimum requirements				V			
(b)	" - location of wall swi							
(c) (d)	" - noise " - durability, maintain	ability						
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Housing Syste	em Producer: 2: Single Family Attached (Guide Criteria Vol. III)	Eve	ategory alvation	n of	Evalu	gory II ation of	SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM	
	3 Enclosed Spaces/Health and Safety	1				rsical — nents	Legend	
		S.S.		ert.	no		Ma - Material H - Housing Unit C - Component HS - Housing System M - Module - Completed	
Criteria		Review of Plans/Specs.	Computations/ Analysis	Test Data/ Industry Cert.	Examination	Testing to be Done	(symbol circled)	
Number	Subject	Rev	Con	Test	Exa	Tesi	Remarks	
L.3.1.1(a)	Elements causing falls							
(b)	Casualties from fires	_			<u> </u>			
(c)	Heating and cooking equipment hazards	ļ						
(d)	Sharp edges; pointed projections, glass doors and enclosures							
(e)	Enclosed spaces openable from inside							
(f)	Fixtures and fittings securely mounted or fastened							
(g)_	Ingress of insects, rodents, etc.							
(h)	Floor surfacing			<u> </u>				
(i)	Security from criminal activity							
(j)	Lighting to provide safety							
(k)	Projecting awnings or hoods	-			<u> </u>			
			-		 			
	Intercept L.3 continued on next page	1						

Housing Syste Building Type Intercept: L.3		Eve	ategon aluation ns & Sp cumen	of ecs.	Evalue Phy	gory II ation of vsical nents	SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM Legend
Criteria		Review of Plans/Specs.	Computations/ Analysis	Test Data/ Industry Cert.	Examination	ig to one	Ma-Material H -Housing Unit C -Component HS -Housing System M -Module -Completed (symbol circled)
Number	Subject	Revie Plans	Computa Analysis	Test I Indus	Ехаш	Testing to be Done	Remarks
L.3.2.1(a)1	Slipperiness/floor surface						
2	Change in slipperiness factor						
3	Slipperiness increases with wetting						
4	" of tub and shower surfaces						
(b)1	Rough surfaces, carpet weaves, sills, etc.						
2	Changes in floor level						
3	Stair and balcony railings						
4	Windows: ease of opening; sills, guards; cleanability	-					
5	Means of egress						
L.3.3.1	Personal security from criminal acts						

Housing System Producer: Building Type: Single Family Attached (Guide Criteria Vol. III) Intercept: L.4 Enclosed Spaces/Fire Safety Criteria			Category I		Category II		SUMMARY FORM FOR		
			Evaluation of Plans & Specs.			tion of	FFSTING AND ANALYSIS PROGRAM		
			& Documentation		Physical — Elements		Legend		
		ecs.	Computations/ Analysis	Test Data/ Industry Cert.	Examination	Testing to be Done	Ma - Material H - Housing Unit C - Component HS - Housing System		
		Review of Plans/Specs.					M -Module Completed (symbol circled)		
Number	Subject •	Rev	Con	Test	Exa	Tes	Remarks		
L.4.2.1	Exits								
L.4.2.2	Egress/outside window		ļ						
L.4.2.3	Flame spread/stairway wall and ceiling								
L.4.2.4	Exit door/minimum width		ļ		<u> </u>				
L.4.2.5	Stairways/ " "		-						
L.4.2.6	Stairs		ļ						
L.4.2.7	Exit doors			ļ					
			 	 					
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Housing System Producer: Building Type: Single Family Attached (Guide Criteria Vol. III) Intercept: L.5 Enclosed Spaces/Acoustic Environment Criteria		Eve Plar	Category I Evaluation of Plans & Specs. & Documentation			gory II stion of sical sents	SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM Legend	
		Review of Plans/Specs.	Computations/ Analysis	Data/ ustry Cert.	Examination	Testing to be Done	Ma - Material H - Housing Unit C - Component HS - Housing System M - Module - Completed (symbol circled)	
Number	Subject	P. P.	Cor	Tes	Ex	Tes	Remarks	
L.5.1.1	Total system: enclosed space noise levels							
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Housing System Producer: Building Type: Single Family Attached (Guide Criteria Vol. III) Intercept: L.6 Enclosed Spaces/Illuminated Environment		Eve	Category I Evaluation of Pians & Specs. & Documentation		Category II Evaluation of Physical Elements		SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM Legend	
Criteria		Review of Plans/Specs.	Computations/ Analysis	Test Data/ Industry Cert.	Examination	Testing to be Done	Ma -Material H -Housing Unit C -Component HS -Housing System M -Module — -Completed (symbol circled)	
Number	Subject	Revi	Com	Test Indu	Exar	Testi be 0	Remarks	
L.6.1.1	Admission of natural light							
L.6.2.1	Lighting elements - capacity							
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Section 1					1			

Housing System Producer: Building Type: Single Family Attached (Guide Criteria Vol. III) Intercept: L.7 Enclosed Spaces/Atmospheric Environment Criteria		C	Category I Evaluation of Plans & Specs. & Documentation		Category II Evaluation of Physical		SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM Legend	
		Plan						
		—	-	Cert.	l	Testing to be Done	Ma - Material H - Housing Unit C - Component HS - Housing System M - Module - Completed	
							(symbol circled)	
Number	Subject	Rev	Con	Tes	Exa	Test be	Remarks	
L.7.1.1	Natural ventilation of habitable rooms							
L.7.1.2	Mechanical ventilation requirements							
L.7.1.3	" for summer comfort							
L.7.1.4	Prevention of air interchange between dwelling units	-						
L.7.1.5	Positive exhaust into common ducts serving kitchen and bathroom							
L.7.2.1	Maximum air infiltration into living units			-				
L.7.3.1	Conditioning of intake air							
					-			
					1			

Housing System Producer: Building Type: Single Family Attached (Guide Criteria Vol. III) Intercept: L.9 Enclosed Spaces/Spatial Characteristics and Arrangement Criteria		Category I			Category II Evaluation of Physical		SUMMARY FORM FOR TESTING AND ANALYSIS PROGRAM	
		Evaluation of Plans & Specs.						
			& Documentation			ments	Legend	
		Review of Plans/Specs.	Computations/ Analysis	Test Data/ Industry Cert.	Examination	Testing to be Done	Ma-Material H -Housing Unit C -Component HS -Housing System	
							M -Module -Completed (symbol circled)	
Number	Subject	Rev	Con	Test	Exa	Test be I	Remarks	
L.9.1.1	Reference to subsequent criteria							
L.9.2.1	Living area							
L.9.3.1	Dining area							
L.9.4.1	Kitchen location							
L.9.4.2	" space							
L.9.4.3	" light and ventilation							
L.9.4.4	" range/fire protection and safety							
L.9.5.1	Laundry spaces							
L.9.6.1	Bedroom spaces							
L.9.7.1	Bathroom spaces							
L.9.8.1	Bedroom closets							
L.9.9.1	Doorways							
L.9.9.2	Habitable rooms/natural lighting and ventilation			-				
				-		++		
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