

# 2008

# Builder Practices Survey

February 2009

Dear Home Builder,

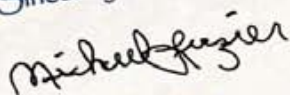
We need your input! For more than 20 years, the NAHB Research Center has relied upon your support for getting the information needed to improve America's housing industry. Fast participation in our survey efforts has been vital to our continued progress. Please complete and return this questionnaire as soon as possible.

We understand there are many demands on your time and at first glance this questionnaire may appear long and complicated, but it uses checkmarks and percentages to make it easy to describe your typical construction practices – not an exact accounting of building materials.

Please be assured that all information about your firm will remain confidential. If you have any questions or would like an additional copy of this questionnaire for a fellow builder, please contact Joanne McAlpin at (800) 638-8556, ext. 6306, or send an e-mail to [jmcalpin@nahbrc.org](mailto:jmcalpin@nahbrc.org).

Thank you in advance for your assistance.

Sincerely,



Michael Luzier  
President  
NAHB Research Center

Respondents who complete and return the survey will receive their choice of one of the following gifts.  
(Please check ONE)

- Embroidered Shirt (M)
- Embroidered Shirt (L)
- Embroidered Shirt (XL)
- Embroidered Shirt (XXL)
- Embroidered Shirt (XXXL)
- Silver Tone Business Card Case
- 100' Contractor Measuring Tape
- Stainless Steel Thermos
- Swiss Army Knife
- Random Gift (inventories too low to list items)
- Embroidered Jacket (M)
- Embroidered Jacket (L)
- Embroidered Jacket (XL)
- Embroidered Jacket (XXL)
- Embroidered Jacket (XXXL)

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**GARAGES AND CARPORTS**

	SFD STARTER # HOUSES ↓	SFD MOVE-UP # HOUSES ↓	SFD LUXURY # HOUSES ↓	SFA TOWNHOUSE/DUPLEX # UNITS ↓	MF MULTIFAMILY # UNITS ↓
1 Car Garage .....	18	41	64	766	773
2 Car Garage .....	19	42	65	767	774
3 or more Car Garage .....	20	43	66	767a	774a
1 Car Carport .....	20a	43a	66a	768	775
2 or more Car Carport .....	20b	43b	66b	769	776
No Garage or Carport .....	21	44	67	769a	776a

**NUMBER OF ROOMS**

	SFD STARTER # ROOMS PER HOUSE ↓	SFD MOVE-UP # ROOMS PER HOUSE ↓	SFD LUXURY # ROOMS PER HOUSE ↓	SFA TOWNHOUSE/DUPLEX # ROOMS PER UNIT ↓	MF MULTIFAMILY # ROOMS PER UNIT ↓
Bedroom(s) .....	22	45	68	88	105
Half Bathroom(s) .....	23a	46a	69a	89a	106a
Full or ¾ Bathroom(s).....	23	46	69	89	106
<b>Total Rooms (Exclude Bathrooms) .....</b>	<b>24</b>	<b>47</b>	<b>70</b>	<b>90</b>	<b>107</b>
Closets ( <b>Include</b> Coat / Linen / Pantry) .....	25	48	71	91	108

**GREEN CERTIFICATION**

What **percent** of your homes or multifamily units were “Green” certified by any of the following programs?

Local or State Green Home Building Program .....	2020
NAHB National Green Building Program™ .....	2021
LEED for Homes .....	2022
Other _____ (PLEASE SPECIFY) .....	2023
<b>Total need not add to 100%</b>	

If you built any “Green” certified homes, what was the typical increase in cost per home or living unit to reach a certification threshold, compared to your non-certified homes?

Write ZERO if no increase in cost ..... \$ \_\_\_\_\_ 2024

**BASEMENT / CRAWL SPACE WALL MATERIAL**

What **percent** of your homes or multifamily buildings had basement or crawlspace walls made of the following materials?

**Do not include brick veneer.**

	SFD HOUSES	SFA UNITS	MF BUILDINGS
Poured concrete, reusable forms .....	109	109a	109b
Concrete block (CMU) .....	110	110a	110b
Precast concrete (e.g., Superior Walls®).....	111	111a	111b
Insulated concrete forms (ICFs) .....	112	112a	112b
Pressure treated wood .....	113	113a	113b
Other _____ (PLEASE SPECIFY) .....	114	114a	114b
	<b>100%</b>	<b>100%</b>	<b>100%</b>

**SUBSLAB PREPARATION**

What did you place under your concrete slabs floors for your living areas?

	(✓ all you use)	SLAB- ON-GRADE	BASEMENT SLAB
4” or greater layer of stone or gravel .....	[ ]	121_1	[ ] 121_2
Less than 4” layer of stone or gravel .....	[ ]	122_1	[ ] 122_2
Sand .....	[ ]	122c_1	[ ] 122c_2
Strips or layers of geotextile drainage mat .....	[ ]	123_1	[ ] 123_2
Rigid foam insulation .....	[ ]	124_1	[ ] 124_2
Perforated plastic pipe .....	[ ]	125_1	[ ] 125_2
Plastic sheet (vapor barrier, 6 mil poly) .....	[ ]	125c_1	[ ] 125c_2
Other _____ (PLEASE SPECIFY) .....	[ ]	126_1	[ ] 126_2
<b>Nothing</b> under slab .....	[ ]	127_1	[ ] 127_2

**ABOVE-GRADE STRUCTURAL WALLS**

What **percent** of your homes’ above-grade exterior walls had the following as a **primary** structural material?

**Do not include foundation walls or brick veneer finish.**

	FIRST STORY	UPPER STORIES
Concrete or masonry .....	128	131
Wood (all types) .....	129	132
Steel (all types) .....	130	133
	<b>100%</b>	<b>100%</b>

## CONCRETE & MASONRY ABOVE-GRADE WALLS

If any of your homes had concrete or masonry **above-grade** walls, what **percent** were each of the following types?

**Do not include** basement walls or brick veneer finish.

Poured concrete, reusable forms .....	_____	146
Concrete block (CMU) .....	_____	147
Precast concrete (e.g., Superior Walls®) .....	_____	148
Insulated concrete forms (ICFs) .....	_____	149
Autoclaved aerated concrete (AAC) .....	_____	150
Structural brick (brick wall supports roof) .....	_____	151
Other concrete or masonry _____ (PLEASE SPECIFY)	_____	152
		<b>100%</b>

## TYPES OF EXTERIOR WOOD & STEEL WALLS

What **percent** of your homes with wood and steel walls used the following types of construction?

Site-built light-frame (2x4s, 2x6s, etc.) .....	_____	134
Panelized light-frame (factory-built wall panels) .....	_____	135
Modular (factory-built structure) .....	_____	136
Structural insulated panels (SIPs) .....	_____	137
Post and beam or "timber frame" .....	_____	138
Logs .....	_____	139
		<b>100%</b>

## LIGHT-FRAME EXTERIOR WALL DEPTH & SPACING

What **percent** of all your exterior light-frame walls were:

	WOOD	STEEL
2x4s at 16" o.c. ....	_____ 140	_____ 140a
2x4s at 24" o.c. ....	_____ 141	_____ 141a
2x6s at 16" o.c. ....	_____ 142	_____ 142a
2x6s at 24" o.c. ....	_____ 143	_____ 143a
Other _____ (PLEASE SPECIFY)	_____ 144	_____ 144a
	<b>100%</b>	<b>100%</b>

## WALL HEIGHT

What **percent** of your interior walls had the following heights?  
**Exclude** two-story foyers from your estimates.

	FIRST STORY	UPPER STORIES
7' or less .....	_____ 501	_____ 508
7½' .....	_____ 502	_____ 509
8' .....	_____ 503	_____ 510
8½' .....	_____ 504	_____ 511
9' .....	_____ 505	_____ 512
10' .....	_____ 506	_____ 513
12' or more .....	_____ 507	_____ 514
	<b>100%</b>	<b>100%</b>

## TYPE OF WOOD WALL STUDS

What is the most common type or species of wood for your **wall studs**? (✓one)

Timberstrand® or laminated strand lumber (LSL) .....	[ ]	1
Finger-jointed (any species) .....	[ ]	2
Southern yellow pine (SYP) .....	[ ]	3
Douglas fir .....	[ ]	4
Hem-fir or other western woods .....	[ ]	5
Spruce / Pine / Fir (SPF) or eastern spruce .....	[ ]	6
LVL (laminated veneer lumber) .....	[ ]	7
Treated lumber .....	[ ]	8
Don't know .....	[ ]	9
Other _____ (PLEASE SPECIFY)	[ ]	10 145

## WALL HEADERS: WINDOWS, DOORS, AND FIREPLACES

What **percent** of the (1) single window, door, and fireplace openings, (2) multiple window and door openings, and (3) garage door openings were spanned by headers of the following materials?

	SINGLE Window / Door / Fireplace Headers	MULTIPLE Window / Door Headers	Garage Door Headers
Built-up dimensional lumber .....	_____ 153	_____ 153a	_____ 167
Solid wood (4xs, etc.) .....	_____ 154	_____ 154a	_____ 168
Glulam .....	_____ 155	_____ 155a	_____ 169
Wooden I-joists used singly .....	_____ 156	_____ 156a	_____ 170
Wooden I-joists doubled .....	_____ 157	_____ 157a	_____ 171
LVL single .....	_____ 158	_____ 158a	_____ 172
LVL doubled .....	_____ 159	_____ 159a	_____ 173
Parallam® .....	_____ 160	_____ 160a	_____ 174
Concrete .....	_____ 161	_____ 161a	_____ 175
Steel (all types) .....	_____ 162	_____ 162a	_____ 176
Glued & nailed box headers .....	_____ 163	_____ 163a	_____ 177
Wood truss .....	_____ 164	_____ 164a	_____ 178
Timberstrand® (LSL) .....	_____ 165	_____ 165a	_____ 179
Fitch plate beams (lumber with steel plate, bolted) .....	_____ 166	_____ 166a	_____ 180
	<b>100%</b>	<b>100%</b>	<b>100%</b>

## INTERIOR WALLS

What **percent** of all your interior walls were:

Masonry or concrete .....	_____ 522
Steel (all spacing) .....	_____ 521a
Lumber: 2x3s at 16" o.c. ....	_____ 515
Lumber: 2x3s at 24" o.c. ....	_____ 516
Lumber: 2x4s at 16" o.c. ....	_____ 517
Lumber: 2x4s at 24" o.c. ....	_____ 518
Lumber: 2x6s at 16" o.c. ....	_____ 519
Lumber: 2x6s at 24" o.c. ....	_____ 520
Lumber: Other dimensions / spacing .....	_____ 520a
	<b>100%</b>

**INTERIOR WALL & CEILING FINISH**

What **percent** of your typical home's total wall and ceiling area had the following interior finishes?

	WALLS	CEILINGS
1/4" plywood paneling .....	_____ 523	_____ 532
1/4" hardboard paneling .....	_____ 524	_____ 533
3/8" gypsum drywall (all types) .....	_____ 525	_____ 534
1/2" gypsum drywall (all types) .....	_____ 526	_____ 535
Cement board (glass-reinforced) .....	_____ 527	_____ 536
Fiber cement (Hardibacker®, etc).....	_____ 530a	_____ 539a
5/8" gypsum drywall (all types) .....	_____ 528	_____ 537
3/4" gypsum drywall (all types) .....	_____ 529	_____ 538
Lumber boards or shingles .....	_____ 530	_____ 539
Acoustical ceiling tiles .....	_____	_____ 540
Other .....	_____ 531	_____ 541
(PLEASE SPECIFY)	<b>100%</b>	<b>100%</b>

**EXTERIOR WALL SHEATHING**

Please consider "sheathing" to be the panel product that is fastened directly to wall studs. What **percent** of your total exterior wall area was sheathed with:

<b>NONE</b> (SIPs, masonry or log walls, etc.) .....	_____ 182
Plywood, 3/8" .....	_____ 183
Plywood, 1/2" .....	_____ 184
Plywood, 5/8" .....	_____ 185
Plywood, 3/4" .....	_____ 186
OSB, 3/8" .....	_____ 187
OSB, 7/16" .....	_____ 188
OSB, 1/2" .....	_____ 188a
OSB, 5/8" .....	_____ 189
OSB, 3/4" .....	_____ 190
Fiberboard (including Homosote & Built-Rite®) .....	_____ 191
Cement board (glass mesh reinforced, Durock®) .....	_____ 192
Fiber Cement (Hardipanel®, etc.).....	_____ 192a
Gypsumboard (including Dens-Glass®, FibeRock®) .....	_____ 193
1/8" foil-faced 3-ply kraft paper (Thermoply®) ...	_____ 194
Lumber board sheathing .....	_____ 195
Extruded polystyrene – XPS (blue Dow Styrofoam®, pink Owens Corning) .....	_____ 196
Expanded polystyrene – EPS, or "bead board" ....	_____ 197
Polyisocyanurate (Tuff-R®, Thermax®, R-Max®) .....	_____ 198
Other .....	_____ 199
(PLEASE SPECIFY)	<b>100%</b>

**TWO LAYERS OF EXTERIOR WALL SHEATHING**

What **percent** of your homes had a layer of foam sheathing placed over a layer of structural sheathing material? **Do not include** layer of foam for EIFS finish. \_\_\_\_\_%

181

Check the most common material of second layer of foam:

1 [ ] XPS    2 [ ] EPS    3 [ ] Polyisocyanurate  
181a

**THICKNESS OF FOAM**

What was the **typical thickness** of the foam you used? (✓ one)

1 [ ] 1/2"                      4 [ ] 1-1/2"  
2 [ ] 5/8 or 3/4"              5 [ ] 2" or greater  
3 [ ] 1"                                      200

What percentage of your homes are fully sheathed with either plywood or OSB? \_\_\_\_\_ 2025

**MATERIAL OF STRUCTURAL FLOOR SYSTEM**

What **percent** of your structural floors in finished areas of your homes (exclude basement and garage floors) were:

	GROUND FLOOR	UPPER FLOORS
Cast-in-place concrete .....	_____ 212	_____ 216
Precast concrete .....	_____ 213	_____ 217
Wood, lumber, or beams .....	_____ 214	_____ 218
Steel (all types) .....	_____ 215	_____ 219
	<b>100%</b>	<b>100%</b>

**DEPTH OF STRUCTURAL FLOOR**

For each material you used, ✓ the **most common depth** of your floor framing:

	LUMBER JOISTS	WOODEN I-JOISTS	OPEN-WEB JOISTS	STEEL JOISTS
8" .....	[ ]	[ ]	[ ]	[ ] <sub>1</sub>
10" (or 9-7/8") .....	[ ]	[ ]	[ ]	[ ] <sub>2</sub>
12" (or 11-7/8") .....	[ ]	[ ]	[ ]	[ ] <sub>3</sub>
14" or greater .....	[ ] 1033	[ ] 1034	[ ] 1035	[ ] 1035a

**TYPES OF WOOD FLOOR FRAMING**

What **percent** of your structural wood floors on ground and upper floors were:

	GROUND FLOOR	UPPER FLOORS
<i>Do not include support beams.</i>		
Lumber joists, solid wood .....	_____ 220	_____ 225
Wooden I-joists .....	_____ 221	_____ 226
Open-web joists (wood floor truss) .....	_____ 222	_____ 227
Structural insulated panels (SIPs) ...	_____ 223	_____ 228
Other .....	_____ 224	_____ 229
(PLEASE SPECIFY)	<b>100%</b>	<b>100%</b>

**SPACING OF FLOOR FRAMING**

What **percent** of your framed floor area had joists spaced at:

	LUMBER JOISTS	WOODEN I-JOISTS	OPEN-WEB JOISTS	STEEL JOISTS
12" o.c. ....	_____ 1036	_____ 1042	_____ 1048	_____ 1048a
16" o.c. ....	_____ 1037	_____ 1043	_____ 1049	_____ 1049a
19.2" o.c. ....	_____ 1038	_____ 1044	_____ 1050	_____ 1050a
24" o.c. ....	_____ 1039	_____ 1045	_____ 1051	_____ 1051a
32" o.c. ....	_____ 1040	_____ 1046	_____ 1052	_____ 1052a
Other spacing .....	_____ 1041	_____ 1047	_____ 1053	_____ 1053a
	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

## SPECIES OF WOOD FLOOR FRAMING

What species of dimensional lumber joist (**not** I-joists) did you **most commonly** use for your floor framing?

(✓ one only)

Southern yellow pine (SYP) .....	[ ]	1
Douglas fir or hem-fir .....	[ ]	2
Spruce / Pine / Fir (SPF), or eastern spruce .....	[ ]	3
Treated lumber .....	[ ]	4
Don't know .....	[ ]	5
Other _____ (PLEASE SPECIFY) .....	[ ]	230 6

## FLOOR SHEATHING (SUBFLOORING)

What **percent** of your total floor area used each of the following sheathing (sub-flooring) materials?

	GROUND FLOOR	UPPER FLOORS
Concrete or SIPs .....	_____ 231	_____ 246
1/2" plywood .....	_____ 232	_____ 247
5/8" plywood .....	_____ 233	_____ 248
3/4" plywood .....	_____ 234	_____ 249
1-1/8" plywood .....	_____ 235	_____ 250
7/16" or 1/2" OSB .....	_____ 236	_____ 251
5/8" OSB (including Advantech) ..	_____ 237	_____ 252
3/4" OSB (including Advantech) ..	_____ 238	_____ 253
7/8" OSB .....	_____ 239	_____ 254
1" OSB .....	_____ 240	_____ 255
1-1/8" or thicker OSB .....	_____ 241	_____ 256
1x boards (3/4" actual, including T&G) ..	_____ 243	_____ 258
2x boards (1-1/2" actual, including T&G) ..	_____ 244	_____ 259
Other _____ (PLEASE SPECIFY) ..	_____ 245	_____ 260
	<b>100%</b>	<b>100%</b>

## RIMBOARD FOR WOODEN I-JOISTS

What percent of your **I-joist floor systems** used each of the following **rimboard** materials?

<b>NO</b> rimboard used (sheathing only) .....	_____ 1117h
TimberStrand® .....	_____ 1117a
OSB (G-P Fiberstrong®, L-P Solid Start®, etc.) ..	_____ 1117b
Wooden I-joists with blocking .....	_____ 1117c
Plywood .....	_____ 1117d
Dimensional lumber (2x10's, etc.) .....	_____ 1117e
LVL (laminated veneer lumber) .....	_____ 1117f
Re-sawn glulam .....	_____ 1117g
	<b>100%</b>

## FLOOR BEAMS: SUPPORT, FLUSH, AND EDGE BEAMS

Floor beams may include 1) **support beams**, which provide a bearing point for floor joists, 2) **flush beams**, which provide support and are recessed into the floor, and 3) **edge beams** that typically support the edge of a loft or stairway (exclude rimboard)..

About how many linear feet (LF) of floor beams did you use in a **typical** house or multifamily living unit?

	GROUND FLOOR	UPPER FLOORS
Single-family detached (SFD) floor beams: LF per HOUSE ..	_____ LF <sub>1061</sub>	_____ LF <sub>1064</sub>
Single-family attached (SFA) floor beams: LF per UNIT .....	_____ LF <sub>1061a</sub>	_____ LF <sub>1064a</sub>
Multifamily floor beams: LF per UNIT .....	_____ LF <sub>1062</sub>	_____ LF <sub>1065</sub>

## FLOOR BEAM MATERIAL

What **percent** of your floor beams were:

	GROUND FLOOR	UPPER FLOORS
Built-up dimension lumber ....	_____ 1099	_____ 1108
Solid wood beams (4x6 or greater) ..	_____ 1100	_____ 1109
Glulam .....	_____ 1101	_____ 1110
LVL .....	_____ 1102	_____ 1111
Parallam® .....	_____ 1103	_____ 1112
TimberStrand® .....	_____ 1103a	_____ 1112a
Open-web Joist .....	_____ 1104	_____ 1113
Steel (all types) .....	_____ 1105	_____ 1114
I-Joist (multiple) .....	_____ 1106	_____ 1115
Other _____ (PLEASE SPECIFY) ..	_____ 1107	_____ 1116
	<b>100%</b>	<b>100%</b>

## ROOF BEAMS AND CEILING SUPPORT BEAMS

For a **typical** house or multifamily **building**, how many **linear feet (LF)** of roof beams (ridge, hip, and valley) and beams located on the ceiling assembly did you use?

**Do not include** wall headers that support roofs.

Single-family detached (SFD) roof beams....	_____ LF <sub>1080</sub>
Single-family attached (SFA) roof beams ...	_____ LF <sub>1080a</sub>
Multifamily <b>building</b> roof beams .....	_____ LF <sub>1080b</sub>

What **percent** of your roof and ceiling assembly beams were:

Built-up dimensional lumber .....	_____ 1081
Solid wood beams (4x6 or greater) .....	_____ 1082
Glulam .....	_____ 1083
LVL .....	_____ 1084
Parallam® .....	_____ 1085
TimberStrand® .....	_____ 1085a
Girder truss .....	_____ 1086
Steel (all types) .....	_____ 1087
I-Joist (multiple) .....	_____ 1088
Other _____ (PLEASE SPECIFY) ..	_____ 1089
	<b>100%</b>

**ROOF FRAMING**

What **percent** of the total roof area on your homes were the following shapes?

Gable .....	_____	261
Hip .....	_____	262
Gambrel .....	_____	263
Flat .....	_____	264a
Other _____	_____	264
	(PLEASE SPECIFY)	<b>100%</b>

**TURNED GABLES AND DORMERS**

How many turned gables (gables perpendicular to the main ridge of the roof) and dormers did your typical house or multifamily building have?

	SFD	SFA	MF BUILDINGS
Turned gables..	_____ 265	_____ 265a	_____ 265b
Dormers .....	_____ 266	_____ 266a	_____ 266b

**TYPE OF ROOF FRAMING**

What **percent** of your houses had roofs framed with:

Combination of trusses and rafters .....	_____	270
Rafters only .....	_____	268
Trusses only .....	_____	269
Structural insulated panels (SIPs) .....	_____	271
Beams and purlins .....	_____	272
Other _____	_____	273
	(PLEASE SPECIFY)	<b>100%</b>

**SPECIES OF ROOF FRAMING LUMBER**

What percent of your dimensional lumber trusses or rafters / ceiling joists (**not** I-joists) were:

	TRUSSES	RAFTERS
Southern yellow pine (SYP) .....	_____ 280	_____ 285
Douglas fir or hem-fir .....	_____ 281	_____ 286
Spruce / Pine / Fir (SPF) .....	_____ 282	_____ 287
Treated lumber .....	_____ 282a	_____ 287a
Don't know .....	_____ 283	_____ 288
Other _____	_____ 284	_____ 289
	(PLEASE SPECIFY)	<b>100%</b>

**COMBINATION TRUSS & RAFTER ROOFS**

For roofs framed with both trusses and rafters, what **percent** of the roof was typically framed with each?

Trusses .....	_____	274
Rafters .....	_____	275
	<b>100%</b>	

**RAFTER ROOFS**

If you built with rafters, what **percent** of your rafters were:

Lumber .....	_____	276
I-joists .....	_____	277
Steel .....	_____	278
	<b>100%</b>	

**TRUSS ROOFS**

If you built with roof trusses, what **percent** of your trusses were:

Lumber .....	_____	276a
I-joists .....	_____	277a
Steel .....	_____	278a
	<b>100%</b>	

**CEILING TYPE**

What **percent** of the ceiling area directly under the roof was:

Sloped (i.e., cathedral or vaulted) .....	_____	296
Flat .....	_____	297
	<b>100%</b>	

**OVERHANG / EAVES**

How deep was the eave or overhang of your typical house?

Inches .....	_____	267
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**ROOF PITCH**

What **percent** of your roofs had pitches of:

Flat to 1/2 / 12" .....	_____	290
1/2 / 12" to 4/12" .....	_____	291
5/12" or 6/12" .....	_____	292
7/12" or 8/12" .....	_____	293
9/12" or 10/12" .....	_____	294
11/12" or greater .....	_____	295
	<b>100%</b>	

**ROOFING MATERIAL**

What **percent** of your typical home's total roof area was roofed with:

Asphalt shingle, three tab, standard weight .....	_____	310
Asphalt shingle, "Architectural" or laminated .....	_____	311
Cedar shingles (sawn) .....	_____	312
Cedar shakes (split) .....	_____	313
Clay or ceramic roof tiles .....	_____	315
Concrete roof tiles .....	_____	316
Fiber-cement shingles .....	_____	317
Slate (natural) .....	_____	318
Steel .....	_____	319
Aluminum .....	_____	320
Copper .....	_____	314
Built-up roof (e.g., hot-mopped asphalt) .....	_____	321
Single ply (EPDM, vinyl, modified bitumen) .....	_____	322
Composite shingles (plastic or recycled rubber) ...	_____	322b
Other _____	_____	322a
	(PLEASE SPECIFY)	<b>100%</b>

**METAL ROOFING STYLE**

What **percent** of your non-copper metal roofing was:

Metal shakes/shingles/tiles .....	_____	310
Standing seam/Vertical ribbed .....	_____	311
Corrugated .....	_____	312
Flat panel .....	_____	313
Granulated .....	_____	322c
Don't know .....	_____	322b
Other _____	_____	322a
	(PLEASE SPECIFY)	<b>100%</b>

**ROOF VENTILATION**

What **percent** of your homes and multifamily buildings had:

	SFD	SFA	MF BUILDINGS
Ridge vents .....	_____ 329	_____ 329a	_____ 329b
Roof vents – not powered .....	_____ 330	_____ 330a	_____ 330b
Wind turbine roof vents .....	_____ 331	_____ 331a	_____ 331b
Roof mounted attic fans .....	_____ 332	_____ 332a	_____ 332b
Gable wall louvers .....	_____ 333	_____ 333a	_____ 333b
Gable mounted attic fans .....	_____ 334	_____ 334a	_____ 334b
Whole house fans .....	_____ 335	_____ 335a	_____ 335b
Soffit vents .....	_____ 336	_____ 336a	_____ 336b
<b>Totals need not add to 100%</b>			

**ROOF SHEATHING**

What **percent** of your total roof area was sheathed with:

<b>NONE</b> (roofing attached directly to framing, or SIPs) ..	_____ 298
3/8” plywood .....	_____ 299
1/2” plywood .....	_____ 300
5/8” plywood .....	_____ 301
3/4” plywood .....	_____ 302
7/16” OSB (including Advantech) .....	_____ 303
1/2” OSB (including Advantech) .....	_____ 303a
5/8” OSB (including Advantech) .....	_____ 304
3/4” OSB (including Advantech) .....	_____ 305
1”x boards (3/4” actual) – no spacing .....	_____ 306
1”x boards (3/4” actual) – spaced .....	_____ 307
2”x lumber (1-1/2” actual – including T&G) .....	_____ 308
Other _____ (PLEASE SPECIFY) .....	_____ 309
<b>100%</b>	

**SOFFIT & FASCIA MATERIAL – EAVES & RAKES**

What **percent** of your soffit and fascia material was made of:

	SOFFIT	FASCIA
<b>NO</b> soffit or fascia installed .....	_____ 358	_____ 366
Solid wood / Lumber .....	_____ 359	_____ 367
Plywood / LVL .....	_____ 360a	_____ 368a
Hardboard or MDF (e.g., Miratec <sup>®</sup> , PrimeTrim <sup>®</sup> , engineered wood trim) .....	_____ 361	_____ 369
OSB (LP SmartSide <sup>®</sup> ) .....	_____ 362	_____ 370
Stucco .....	_____ 363	_____ 371
Cellular PVC (Azek <sup>®</sup> or Koma <sup>®</sup> ) .....	_____ 365e	_____ 373e
Vinyl (wrap for fascia) .....	_____ 364	_____ 372
Aluminum (wrap for fascia) .....	_____ 365	_____ 373
Steel .....	_____ 365b	_____ 373b
Fiber Cement .....	_____ 365c	_____ 373c
Urethane / Polyurethane plastic .....	_____ 365d	_____ 373d
Plastic & wood fiber composite .....	_____ 365f	_____ 373f
Other _____ (PLEASE SPECIFY) .....	_____ 365a	_____ 373a
<b>100%</b>		<b>100%</b>

**SIDING / EXTERIOR FINISH MATERIAL**

What **percent** of the total exterior wall area for all the homes you built, including garages and dormers, was finished (sided) with the following materials?

**Wood-based Siding**

Plywood panels (e.g., T-111) .....	_____ 341
Hardboard (e.g., Masonite <sup>®</sup> , ABTCO) .....	_____ 342
Lumber boards (cedar or pine clapboards, etc.) .....	_____ 343
Cedar shingles (sawn) or shakes (split) .....	_____ 344
OSB (e.g., LP SmartLap <sup>®</sup> , LP SmartPanel <sup>®</sup> ) ...	_____ 345
Other type of wood siding _____ (PLEASE SPECIFY) .....	_____ 346

**Masonry and Cement Materials**

Brick .....	_____ 347
Natural stone .....	_____ 348
Manufactured stone (“synthetic stone”) .....	_____ 349
Cement stucco .....	_____ 350
Synthetic stucco or EIFS (e.g., Dryvit <sup>®</sup> , STO <sup>®</sup> ) .....	_____ 351
Architectural concrete block (split-face, etc.) ...	_____ 352
Fiber-cement siding (e.g., Hardiplank <sup>®</sup> , CertainTeed) .....	_____ 353

**Plastic & Metal Siding**

Vinyl .....	_____ 354
Aluminum .....	_____ 355
Steel .....	_____ 356
Other _____ (PLEASE SPECIFY) .....	_____ 357
<b>100%</b>	

**EXTERIOR TRIM MATERIAL**

What **percent** of the total exterior ornamental trim you installed was made of (exclude soffit & fascia):

<b>NO</b> exterior ornamental trim installed .....	_____ 719
Solid wood / Lumber .....	_____ 720
Plywood / LVL .....	_____ 721
Hardboard or MDF (e.g., Miratec <sup>®</sup> , PrimeTrim <sup>®</sup> , engineered wood trim) .....	_____ 722
OSB (LP SmartSide <sup>®</sup> ) .....	_____ 723
Stucco .....	_____ 723a
Vinyl (wrap) .....	_____ 723b
Aluminum (wrap) .....	_____ 723c
Steel .....	_____ 725
Fiber Cement .....	_____ 725a
Urethane / Polyurethane plastic .....	_____ 725b
Cellular PVC (Azek <sup>®</sup> or Koma <sup>®</sup> ) .....	_____ 725c
Plastic & wood fiber composite .....	_____ 725d
Other _____ (PLEASE SPECIFY) .....	_____ 724
<b>100%</b>	

**EXTERIOR TRIM TYPE**

Considering your typical house, what style of exterior trim / molding do you **most commonly** apply?

	EAVES	FRONT DOOR	FRONT WINDOWS	OTHER DOORS OR WINDOWS
Board only, no crown	[ ]	[ ]	[ ]	[ ] <sub>1</sub>
Board and crown	[ ]	[ ]	[ ]	[ ] <sub>2</sub>
Crown only	[ ]	[ ]	[ ]	[ ] <sub>3</sub>
Dentil molding	[ ]	[ ]	[ ]	[ ] <sub>4</sub>
Pediments	[ ]	[ ]	[ ]	[ ] <sub>5</sub>
Pilasters	[ ]	[ ]	[ ]	[ ] <sub>6</sub>
Arches	[ ]	[ ]	[ ]	[ ] <sub>7</sub>
Other special moldings	[ ]	[ ]	[ ]	[ ] <sub>8</sub>
None (part of door / window)	[ ] N76	[ ] N77	[ ] N78	[ ] N79

**WINDOWS**

**AVERAGE WINDOW OPENINGS PER HOUSE**

What was the **average number** of window openings (in the wall framing) in your typical house?

Exclude openings for doors and non-prime windows.

SFD Starter	SFD Move-up	SFD Luxury	SFA Per UNIT	MF Per UNIT
_____ 374a	_____ 374b	_____ 374c	_____ 375	_____ 376

**AVERAGE WINDOW UNITS PER HOUSE**

Considering that some window openings have more than one window unit per opening: how many window units were in your typical home?

Include both operable (venting) and fixed units.

Average number of window units per new home:

SFD Starter	SFD Move-up	SFD Luxury	SFA Per UNIT	MF Per UNIT
_____ 377a	_____ 377b	_____ 377c	_____ 378	_____ 379

**GLAZING**

What percent of your windows were:

Single glazed	_____ 422
Double glazed	_____ 423
Triple glazed	_____ 424
Heat-Mirror®	_____ 425
	<b>100%</b>

**GLASS TYPE**

What type of glass did your windows most commonly have?

Clear	_____ 426
Low-E	_____ 427
Argon filled	_____ 427a
Tinted	_____ 428
Impact resistant	_____ 428a

Totals need not add to 100%

**MATERIAL OF WINDOW FRAMES**

What percent of all the window units you installed had the following frame material?

	SFD	SFA	MF UNITS
Wood (no cladding)	_____ 380	_____ 387	_____ 394
Wood, aluminum clad	_____ 381	_____ 388	_____ 395
Wood, vinyl clad	_____ 382	_____ 389	_____ 396
Aluminum	_____ 383	_____ 390	_____ 397
Vinyl	_____ 384	_____ 391	_____ 398
Composite (fiberglass)	_____ 385	_____ 392	_____ 399
Other (PLEASE SPECIFY)	_____ 386	_____ 393	_____ 400
	<b>100%</b>	<b>100%</b>	<b>100%</b>

**WINDOW TYPE**

What percent of all the window units you installed were:

	SFD	SFA	MF UNITS
Casement	_____ 401	_____ 408	_____ 415
Awning	_____ 402	_____ 409	_____ 416
Double hung	_____ 403	_____ 410	_____ 417
Single hung	_____ 404	_____ 411	_____ 418
Sliding (side-by-side)	_____ 405	_____ 412	_____ 419
Fixed (rectangular)	_____ 406	_____ 413	_____ 420
Fixed (non- rectangular)	_____ 407	_____ 414	_____ 421
Other (PLEASE SPECIFY)	_____ 407a	_____ 414a	_____ 421a
	<b>100%</b>	<b>100%</b>	<b>100%</b>

**SKYLIGHTS AND ROOF WINDOWS**

How many skylights/roof windows did your typical house have?

	SFD	SFA	MF Per BUILDING
Skylights	_____ 323	_____ 325	_____ 327
Tubular Skylights	_____ 323a	_____ 325a	_____ 327a
Roof windows	_____ 324	_____ 326	_____ 328

**EXTERIOR SHUTTERS**

How many PAIRS of exterior shutters did your typical house have?

	SFD	SFA	MF Per UNIT
	_____ 731	_____ 731a	_____ 731b

What percent of the shutters were made of:

Wood (any type)	_____ 732	_____ 732a	_____ 732b
Plastic (including polyurethane and PVC)	_____ 733	_____ 733a	_____ 733b
Other	_____ 734	_____ 734a	_____ 734b
	<b>100%</b>	<b>100%</b>	<b>100%</b>

What percent of the shutters were of the following styles?

Raised panel	_____ 735	_____ 735a	_____ 735b
Louvered	_____ 736	_____ 736a	_____ 736b
Board and Batten	_____ 737	_____ 737a	_____ 737b
Other	_____ 738	_____ 738a	_____ 738b
	<b>100%</b>	<b>100%</b>	<b>100%</b>

## PATIO DOORS

How many patio door **openings** did your typical house have?  
Please include both sliding and hinged patio doors.

SFD Starter	SFD Move-up	SFD Luxury	SFA Per UNIT	MF Per UNIT
_____ 429a	_____ 429b	_____ 429c	_____ 430	_____ 431

### PATIO DOOR TYPE

What **percent** of all your patio doors were:

	SFD	SFA	MF
Swinging (hinged) .....	_____ 432	_____ 434	_____ 436
Sliding .....	_____ 433	_____ 435	_____ 437
	<b>100%</b>	<b>100%</b>	<b>100%</b>

### PATIO DOOR MATERIAL

What **percent** of all your patio doors were:

	HINGED	SLIDING
Wood (no cladding) .....	_____ 438	_____ 446
Wood, aluminum clad .....	_____ 439	_____ 447
Wood, vinyl clad .....	_____ 440	_____ 448
Steel .....	_____ 441	_____ 449
Aluminum .....	_____ 442	_____ 450
Vinyl .....	_____ 443	_____ 451
Composite (fiberglass, etc.) .....	_____ 444	_____ 452
Other _____ (PLEASE SPECIFY)	_____ 445	_____ 453
	<b>100%</b>	<b>100%</b>

## EXTERIOR DOORS

How many exterior entry door **OPENINGS** were in your typical house?

Exclude patio doors.

SFD Starter	SFD Move-up	SFD Luxury	SFA Per UNIT	MF Per UNIT
_____ 454a	_____ 454b	_____ 454c	_____ 455	_____ 456

### EXTERIOR DOOR MATERIAL

What **percent** of all your exterior doors were: (If glass, answer for frame material)

Exclude patio doors.

	FRONT	OTHER
Solid wood – raised panel .....	_____ 457	_____ 462
Wood – flush .....	_____ 458	_____ 463
Steel – raised panel .....	_____ 459	_____ 464
Steel – flush .....	_____ 460	_____ 465
Fiberglass .....	_____ 461	_____ 466
Other _____ (PLEASE SPECIFY)	_____ 461a	_____ 466a
	<b>100%</b>	<b>100%</b>

### DOUBLE FRONT DOORS

What **percent** of your front doors were double doors? \_\_\_\_\_ 467

## SIDELITES

What **percent** of your front doors had sidelites?

Sidelites on one side .....	_____ 468
Sidelites on both sides .....	_____ 469
<b>NO</b> sidelites .....	_____ 470
	<b>100%</b>

## MULTIFAMILY COMMON ENTRY DOORS

In some multifamily buildings, the individual living units have entry doors opening directly to the outside. Other buildings have common entry doors opening to hallways leading to entry doors for the individual living units.

What **percent** of your multifamily buildings used common entry doors? .....

Of the new multifamily buildings with common entry doors, **how many** common entry doors, including double doors, did a **typical** building have? .....

## INTERIOR DOORS

Interior doors include bedroom, bathroom, closet, and all other interior doors. What **percent** of your interior doors were:

Single interior hinged door(s) .....	_____ 477a
Double interior hinged door(s) .....	_____ 477b
Single bi-fold door(s) .....	_____ 477c
Double bi-fold door(s) .....	_____ 477d
Sliding / Pocket / Bypass door(s) .....	_____ 477e
Other door(s) _____ (PLEASE SPECIFY)	_____ 477f
	<b>100%</b>

### INTERIOR DOOR MATERIAL

What **percent** of all your interior doors were:

	PASSAGE	CLOSET
<b>SOLID WOOD DOORS</b>		
Panel door .....	_____ 478	_____ 487
Flush door .....	_____ 479	_____ 488
Louvered door .....	_____ 479a	_____ 488a
Door with glass units .....	_____ 480	_____ 489
<b>ENGINEERED WOOD DOORS</b>		
Hollow core panel door .....	_____ 480a	_____ 489a
Hollow core flush door .....	_____ 481	_____ 490
Solid core panel door .....	_____ 482	_____ 491
Solid core flush door .....	_____ 482a	_____ 491a
<b>OTHER TYPES OF DOORS</b>		
Mirror on steel frame .....	_____ 483	_____ 492
Steel (no mirror) .....	_____ 484	_____ 493
Other _____ (PLEASE SPECIFY)	_____ 486	_____ 495
	<b>100%</b>	<b>100%</b>

## CABINETS & COUNTERTOPS

Indicate the **number** of cabinets and the **linear feet** of kitchen countertop you installed in a typical home.

	SFD & SFA	MF
<b>Number</b> of Kitchen cabinets .....	_____ 542	_____ 558
<b>Number</b> of Vanity cabinets .....	_____ 543	_____ 559
<b>Number</b> of Medicine cabinets .....	_____ 543a	_____ 559a
<b>Number</b> of Other cabinets .....	_____ 544	_____ 560
<b>Linear feet</b> of Kitchen countertops ..	_____ 545	_____ 561

## KITCHEN AND VANITY COUNTERTOP MATERIAL

What **percent** of your kitchen and bathroom vanity countertops were made of:

	KITCHEN	VANITY
Solid Surface (e.g., Corian <sup>®</sup> , Surell <sup>®</sup> , Swanstone <sup>®</sup> ) .....	_____ 584	_____ 590
Laminate (e.g., Formica <sup>®</sup> , WilsonArt <sup>®</sup> ) .....	_____ 585	_____ 591
Ceramic tile .....	_____ 586	_____ 592
Cultured marble .....	_____ 587	_____ 593
Engineered stone or quartz surfacing (Zodiaq <sup>®</sup> , Silestone <sup>®</sup> ) .....	_____ 587a	_____ 593a
Solid wood (butcher block) .....	_____ 588	_____ 594
Granite .....	_____ 589	_____ 594a
Marble, slate, or other natural stone..	_____ 589a	_____ 595a
Other _____ (PLEASE SPECIFY)	_____ 589b	_____ 595b
	<b>100%</b>	<b>100%</b>

## MATERIAL OF CABINET BOX

What **percent** of the cabinets you installed had sides and shelves made of:

	SFD & SFA	MF
Wood veneer on particleboard or MDF ...	_____ 576	_____ 580
Solid Wood .....	_____ 576a	_____ 580a
Plastic or paper overlay, or laminate on particleboard or MDF .....	_____ 577	_____ 581
Plywood (all types) .....	_____ 578	_____ 582
Other _____ (PLEASE SPECIFY)	_____ 579	_____ 583
	<b>100%</b>	<b>100%</b>

## CABINET DOOR TYPE

What **percent** of the cabinets you installed had the following types of doors?

	SFD & SFA	MF
Wood finish, raised panel in frame .	_____ 563	_____ 570
Wood finish, flat panel in frame ....	_____ 564	_____ 571
Glass panel in wood frame .....	_____ 564a	_____ 571a
Laminate with raised panel look ....	_____ 567	_____ 574
Wood finish, flat panel, no frame ..	_____ 565	_____ 570
Laminate finish, flat panel, no frame	_____ 566	_____ 573
Other _____ (PLEASE SPECIFY)	_____ 568	_____ 575
	<b>100%</b>	<b>100%</b>

## CABINET FRAME TYPE

What **percent** of the cabinets you installed had the following types of face frames?

	SFD & SFA	MF
Frameless (European style) .....	_____ 562a	_____ 569a
Face-framed (Traditional) .....	_____ 562b	_____ 569b
Other: _____ (PLEASE SPECIFY)	_____ 562c	_____ 569c
	<b>100%</b>	<b>100%</b>

## DRIVEWAYS

The following questions deal **only** with **single-family** homes.

<b>Percent</b> of single-family homes with driveways ...	_____ 777
<b>Length</b> (in feet) of typical driveway.....	_____ 777_L
<b>Width</b> (in feet) of typical driveway .....	_____ 777_W

What **percent** of your driveways were made of:

Asphalt .....	_____ 778
Poured concrete (including stamped/stenciled) .....	_____ 779
Brick .....	_____ 780
Concrete paver .....	_____ 781
Gravel (crushed stone) <b>with</b> concrete parking pad .....	_____ 782
Gravel (crushed stone) <b>no</b> concrete parking pad .....	_____ 783
Other _____ (PLEASE SPECIFY)	_____ 784
	<b>100%</b>

## GARAGE DOORS

What **percent** of your garages had the following types of doors?

One single door .....	_____ 750a
One double door .....	_____ 750
Two single doors .....	_____ 751
One double door, one single door .....	_____ 752
Three single doors.....	_____ 753
Other configuration .....	_____ 753a
	(PLEASE SPECIFY) <b>100%</b>

## GARAGE DOOR OPTIONS

What **percent** of your garage doors were the following types?

Sectional .....	_____ 739
One-piece (canopy or retractable).....	_____ 740
Side hinged .....	_____ 741
Other .....	_____ 742
	<b>100%</b>

What **percent** of your garage doors were the following materials?

Steel .....	_____ 754
Wood .....	_____ 755
Fiberglass or Plastic .....	_____ 756
Other .....	_____ 757
	<b>100%</b>

What **percent** of your garage doors were the following styles?

Raised panel .....	_____ 759
Flat panel .....	_____ 760
Other .....	_____ 761
	<b>100%</b>

What **percent** of your garage doors were insulated? \_\_\_\_\_ 821a

What **percent** of your garage doors had windows? .. \_\_\_\_\_ 824a

What **percent** of your garage doors had openers? .. \_\_\_\_\_ 745

## FINISHED FLOORING TYPE

What type of flooring do you **most commonly** install in the following rooms?

(✓ only one box per row)	Wall- to-Wall Carpet	Hardwood (solid)	Hardwood (engineered)	Vinyl Sheet	Vinyl Tile	Laminate (Pergo, <sup>®</sup> Wilsonart <sup>®</sup> )	Ceramic Tile	Slate	Marble	Other	
	1	2	3	4	5	6	7	8	9	10	
Entry foyer (✓one) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	642
Living room (✓one) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	643
Dining room (✓one) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	644
Family room, den, rec room (✓one) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	645
Kitchen (✓one) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	646
Bedrooms (✓one) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	647
Half bathrooms (✓one) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	648
Full bathrooms (✓one) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	649
Hallway (✓one) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	651
Finished basement (✓one) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	651a

### FLOORING UNDERLAYMENT MATERIAL

Underlayment is a second layer of sheet goods over the structural floor sheathing or concrete slab.

What **percent** of all the flooring underlayment you used was:

Lauan plywood .....	_____	668
1/4" OSB .....	_____	669
3/8" OSB .....	_____	670
7/16" or 1/2" OSB .....	_____	671
5/8" OSB .....	_____	672
3/4" OSB .....	_____	673
1/4" plywood (other than lauan) .....	_____	674
3/8" plywood .....	_____	675
1/2" plywood .....	_____	676
5/8" plywood .....	_____	677
3/4" plywood .....	_____	678
1/4" particleboard .....	_____	679
3/8" particleboard .....	_____	680
1/2" particleboard .....	_____	681
5/8" particleboard .....	_____	682
3/4" particleboard .....	_____	683
1/4" hardboard .....	_____	684
Fiber-cement (e.g., Hardibacker <sup>®</sup> , Viroc <sup>®</sup> ) .....	_____	685a
Cement board (glass fiber reinforced, Durock <sup>®</sup> ) .....	_____	685
Gypsum panel (FibeRock <sup>®</sup> or Dens-Shield <sup>®</sup> ) .....	_____	686
Poured lightweight concrete (Gyperete <sup>®</sup> , etc.) .....	_____	686a
Other _____ (PLEASE SPECIFY)	_____	687
<b>100%</b>		

### ROOMS WITH FLOORING UNDERLAYMENT

In which rooms did you **typically** use underlayment?

(✓ all that apply)

None .....	[ ]	661a
All Rooms .....	[ ]	661b
Entry foyer .....	[ ]	652
Living room .....	[ ]	653
Dining room .....	[ ]	655
Family room, den, rec room .....	[ ]	656
Kitchen .....	[ ]	657
Bedrooms .....	[ ]	658
Half bathrooms .....	[ ]	659
Full bathrooms .....	[ ]	661
Hallway .....	[ ]	661c
Other rooms _____ (PLEASE SPECIFY)	[ ]	662

### INSULATION

#### FLAT CEILINGS / ATTIC INSULATION MATERIAL

What **percent** of your total **flat** ceiling areas (e.g., attics) were insulated with the following materials, and what was the typical R-value?

	% FLAT CEILINGS INSULATED	R-VALUE
<b>NOT</b> insulated .....	_____	820
Fiberglass batt and blown .....	_____	812 _____ 812r
Fiberglass batt .....	_____	813 _____ 813r
Fiberglass blown .....	_____	814 _____ 814r
Rockwool batt .....	_____	815 _____ 815r
Rockwool blown .....	_____	816 _____ 816r
Cellulose blown .....	_____	817 _____ 817r
Spray foam .....	_____	818 _____ 818r
Foam board .....	_____	822 _____ 822r
Other _____ (PLEASE SPECIFY)	_____	819 _____ 819r
<b>100%</b>		

**SLAB-ON-GRADE FOUNDATION INSULATION**

What type of insulation did you **typically** use with slab-on-grade foundations, beneath the slab and / or around the perimeter? **One ✓ per column:**

	BENEATH SLAB	PERIMETER
Extruded polystyrene (e.g., Dow-Styrofoam®, etc.)	[ ]	[ ] <sub>1</sub>
Expanded polystyrene (bead board)	[ ]	[ ] <sub>2</sub>
Polyisocyanurate (e.g., Thermax®)	[ ]	[ ] <sub>3</sub>
Fiberglass	[ ]	[ ] <sub>4</sub>
No insulation used for slab	[ ] <sub>843</sub>	[ ] <sub>844</sub>

**THICKNESS OF SLAB INSULATION MATERIAL**

What was the **typical thickness** of the insulation you used with slab-on-grade foundations, beneath the slab and / or around the perimeter? **One ✓ per column:**

	BENEATH SLAB	PERIMETER
3/4"	[ ]	[ ] <sub>1</sub>
1"	[ ]	[ ] <sub>2</sub>
1-1/2"	[ ]	[ ] <sub>3</sub>
2" or more	[ ] <sub>845</sub>	[ ] <sub>846</sub>

**BASEMENT AND CRAWL SPACE INSULATION**

What method did you **typically** use to insulate the foundations of homes with basements or crawl spaces? **(One ✓ per column)**

	BASE-MENTS	CRAWL SPACES
Between floor joists of the ground floor	[ ]	[ ] <sub>1</sub>
Entire <b>interior</b> and <b>exterior</b> surfaces of the foundation wall	[ ]	[ ] <sub>2</sub>
Entire <b>interior</b> surface of foundation wall	[ ]	[ ] <sub>3</sub>
Only above-grade <b>interior</b>	[ ]	[ ] <sub>4</sub>
Entire <b>exterior</b> surface of foundation wall	[ ]	[ ] <sub>5</sub>
Only below-grade portion of foundation wall <b>exterior</b>	[ ]	[ ] <sub>6</sub>
Only above-grade portion of foundation wall <b>exterior</b>	[ ]	[ ] <sub>7</sub>
Foundation wall cavity	[ ]	[ ] <sub>8</sub>
<b>NO</b> foundation insulation used	[ ] <sub>847</sub>	[ ] <sub>848</sub>

**FOUNDATION WALL INSULATION TYPE**

What material did you **typically** use to insulate your basement or crawl space walls, and what was the R-value?

If you insulated **both the interior and exterior** surfaces, you may ✓ **two** materials; otherwise ✓ **only one**.

	MATERIAL	R-VALUE
Fiberglass batt or blanket	[ ] <sub>851_1</sub>	_____ 851_1r
Rockwool batt	[ ] <sub>851_2</sub>	_____ 851_2r
Fiberglass / rockwool board	[ ] <sub>851_3</sub>	_____ 851_3r
Extruded polystyrene (XPS)	[ ] <sub>851_4</sub>	_____ 851_4r
Expanded polystyrene (EPS)	[ ] <sub>851_5</sub>	_____ 851_5r
Polyisocyanurate	[ ] <sub>851_6</sub>	_____ 851_6r
Spray foam	[ ] <sub>851_8</sub>	_____ 851_8r
Other	[ ] <sub>851_7</sub>	_____ 851_7r

(PLEASE SPECIFY)

**HOUSES INSULATED BETWEEN FLOOR JOISTS**

What material did you **typically** use to insulate between ground floor joists and what was the **typical R-value**?

	MATERIAL	R-VALUE
Fiberglass batt or blanket	[ ] <sub>1</sub>	_____
Rockwool batt	[ ] <sub>2</sub>	_____
Fiberglass blown	[ ] <sub>3</sub>	_____
Cellulose blown	[ ] <sub>4</sub>	_____
Spray foam	[ ] <sub>5</sub>	_____
Foam board or SIPs	[ ] <sub>849</sub>	_____ 850

**GARAGE INSULATION**

What **percent** of your garages had insulation installed in the:

Ceilings	_____	853
All walls	_____	854
Only walls shared with living space	_____	855

**Total need not add to 100%**

**WALL CAVITY INSULATION MATERIAL**

What **percent** of your homes had the following wall cavity insulation materials, and what were their R-values?

**Do not include** foam exterior wall sheathing.

	% HOMES	R-VALUE
<b>NO</b> wall cavity insulation	_____ 840	
Fiberglass batt	_____ 832	_____ 832r
Rockwool batt	_____ 833	_____ 833r
Fiberglass blown behind mesh	_____ 834	_____ 834r
Fiberglass blown-in, no mesh	_____ 835	_____ 835r
Cellulose blown behind mesh	_____ 836	_____ 836r
Cellulose blown-in, no mesh	_____ 837	_____ 837r
Spray foam	_____ 868	_____ 868r
Foam board or SIPs	_____ 838	_____ 838r
Other (PLEASE SPECIFY)	_____ 839	_____ 839r
	<b>100%</b>	<b>100%</b>

If you used spray foam insulation **anywhere** in your homes, was it typically Polyurethane?

Yes	[ ] <sub>1</sub>
No	[ ] <sub>2</sub>
Don't know	[ ] <sub>3</sub>

945

**CATHEDRAL CEILING INSULATION MATERIAL**

What **percent** of your cathedral / sloped ceilings were insulated with the following materials, and what was the typical R-value?

	% CATHEDRAL CEILINGS INSULATED	R-VALUE
<b>NOT</b> insulated	_____ 831	
Fiberglass batt	_____ 827	_____ 827r
Rockwool batt	_____ 828	_____ 828r
Spray foam	_____ 842	_____ 842r
Foam board or SIPs	_____ 829	_____ 829r
Other (PLEASE SPECIFY)	_____ 830	_____ 830r
	<b>100%</b>	

**SOUND INSULATION**

What **percent** of your homes had some insulation in their interior partition walls and / or floors-between-stories to dampen sound?

	SFD	SFA	MF BUILDINGS
Homes with <b>wall</b> sound insulation	_____ 806	_____ 807	_____ 808
Homes with <b>floor</b> sound insulation	_____ 806a	_____ 807a	_____ 808a

Of your homes with **wall sound insulation**, how many linear feet (LF) of interior partition wall did you insulate in your **typical** house or unit?

LF of <b>wall</b> with sound insulation	_____ 809	_____ 810	_____ 811
---	-----------	-----------	-----------

Of your homes with **floor sound insulation**, how many square feet (SF) of floor area did you insulate in your **typical** house or unit?

Sq.Ft. of <b>floor</b> with sound insulation	_____ 809a	_____ 810a	_____ 811a
--	------------	------------	------------

**AIR INFILTRATION BARRIERS / HOUSE WRAP**

What **percent** of your homes and multifamily buildings were wrapped with **air infiltration barrier** material?

**Exclude** roofing felt.

	SFD	SFA	MF BUILDINGS
Percent wrapped: .....	_____ 856	_____ 856a	_____ 856b

**RADIANT BARRIERS**

What **percent** of your houses had radiant barriers in the wall, roof, or ceiling assembly?

Radiant barrier roof sheathing .....	_____ 857
Other roof/ceiling/attic radiant barrier .....	_____ 857a
Radiant barrier in wall .....	_____ 858

**Totals need not add to 100%**

**AIR (HVAC) DUCTS**

What **percent** of your houses with ducted HVAC systems had the main duct and run-outs located in the:

Basement, crawl space or in framed floors only	_____ 1008
Attic only .....	_____ 1009
Both attic and basement or crawlspace .....	_____ 1010
In or under concrete floor slab .....	_____ 1011
Both in attic and concrete floor slab .....	_____ 1011a
	<b>100%</b>

**AIR DUCT MATERIAL**

What **percent** of your houses with ducted HVAC systems had the following types of duct material?

**MAIN DUCTS**

Metal .....	_____ 912
Flexible .....	_____ 913
Fiberglass, rigid (foil-faced fiberglass board).....	_____ 914
Other .....	_____ 914a
	(PLEASE SPECIFY)
	<b>100%</b>

**RUN-OUT DUCTS**

Metal .....	_____ 915
Flexible .....	_____ 916
Fiberglass, rigid (foil-faced fiberglass board) ...	_____ 917
Other .....	_____ 917a
	(PLEASE SPECIFY)
	<b>100%</b>

**WALL STACKS**

Metal .....	_____ 918
Fiberglass, rigid (foil-faced fiberglass board) ...	_____ 919
<b>NONE</b> (wall cavity) .....	_____ 920
Other .....	_____ 920a
	(PLEASE SPECIFY)
	<b>100%</b>

**RIGID FIBERGLASS DUCTS**

If you used any rigid fiberglass ducts, what was the typical thickness of the fiberglass board used. (**✓one**)

1 inch .....	[ ] 1
2 inch .....	[ ] 2
Other .....	[ ] 3
	(PLEASE SPECIFY) 926

**METAL DUCT INSULATION**

If you used any metal duct, what **percent** of all the metal ducting was insulated by the following methods, if any?

Lined with insulation (insulation inside the duct)	_____ 921
Wrapped with insulation .....	_____ 922
<b>NOT</b> insulated .....	_____ 924
Other .....	_____ 923
	(PLEASE SPECIFY)
	<b>100%</b>

**METAL DUCT WRAP THICKNESS**

If you used any duct insulation wrap, what was the typical thickness? (**✓one**)

1-1/2 inches or less .....	[ ] 1
2 inches .....	[ ] 2
More than 2 inches .....	[ ] 3
	925

**FIREPLACES**

What **percent** of your homes had fireplaces (or chimneys for wood stoves)?

	SFD	SFA	MF UNITS
<b>NO</b> fireplaces or chimneys	_____ 712	_____ 712a	_____ 712b
One fireplace / chimney ..	_____ 713	_____ 713a	_____ 713b
Two fireplaces / chimneys	_____ 714	_____ 714a	_____ 714b
Three or more .....	_____ 715	_____ 715a	_____ 715b
	<b>100%</b>	<b>100%</b>	<b>100%</b>

What **percent** of your fireplaces and stoves were:

Site-built brick or stone .....	_____ 705
Site-built concrete masonry units .....	_____ 706
Factory-built steel – open-front .....	_____ 708
Factory-built steel – closed front .....	_____ 709
Stoves – wood or pellet burning .....	_____ 710
Chimney only – ready for stove .....	_____ 711
Other .....	_____ 711a
	(PLEASE SPECIFY)
	<b>100%</b>

What **percent** of your fireplaces and stoves were:

Gas .....	_____	716a
Wood, pellet, or corn .....	_____	716b
Electric .....	_____	716c
Jel / Gel .....	_____	716d
Other or not operational .....	_____	716e
	<b>100%</b>	

**DECKS, PATIOS, PORCHES, & FLATWORK**

What **percent** of your homes had the following structures, and what was their typical **size** in square feet?

	PERCENT	SQ. FT.
Deck (outside) .....	_____ 927	_____ 928
Patio / Pool deck .....	_____ 929	_____ 930
Breezeway .....	_____ 931	_____ 932
Front porch .....	_____ 933	_____ 934
Front stoop .....	_____ 935	_____ 936
Side porch .....	_____ 937	_____ 938
Screened-in porch .....	_____ 939	_____ 940
	<b>Totals need not add to 100%</b>	

**TYPE OF PATIO / POOL DECK**

What **percent** of your patios had surfacing material made of:

Poured concrete (include stamped or stenciled) ..	_____ 955
Concrete pavers .....	_____ 956
Brick pavers .....	_____ 957
Tiles – brick or clay .....	_____ 957a
Natural stone .....	_____ 958
Treated wood block .....	_____ 959
Treated lumber .....	_____ 959a
Other _____ (PLEASE SPECIFY)	_____ 960
	<b>100%</b>

**DECK AND PORCH MATERIAL**

What **percent** of the decks and porches you built had decking or surface material made of:

	DECKS	PORCHES
Treated wood .....	_____ 961	_____ 968
Cedar .....	_____ 964	_____ 971
Redwood .....	_____ 965	_____ 972
Other untreated wood .....	_____ 966	_____ 973
Plastic & wood fiber composite (Trex, etc.) .....	_____ 966a	_____ 973a
PVC, vinyl, or fiberglass .....	_____ 967	_____ 974
Brick .....	_____ 975a	_____ 975a
Tiles – brick or clay .....	_____ 975b	_____ 975b
Concrete (include stamped and stenciled) .....	_____ 975	_____ 975
Natural stone .....	_____ 975c	_____ 975c
	<b>100%</b>	<b>100%</b>

**DECK AND PORCH RAILINGS**

What **percent** of your decks and porches had railings?

Decks _____ %	1121	Porches _____ %	1122
---------------	------	-----------------	------

What **percent** of your deck and porch railings consisted primarily of the following materials?

	DECKS	PORCHES
Treated wood .....	_____ 1123	_____ 1122
Cedar .....	_____ 1125	_____ 1124
Redwood .....	_____ 1127	_____ 1126
Other untreated wood .....	_____ 1129	_____ 1128
Plastic & wood fiber composite (Trex) .....	_____ 1131	_____ 1130
PVC, vinyl, or fiberglass .....	_____ 1133	_____ 1132
Aluminum .....	_____ 1135	_____ 1134
Wrought iron or steel .....	_____ 1137	_____ 1136
Masonry or concrete (all types) ..	_____ 1139	_____ 1138
Other _____ (PLEASE SPECIFY)	_____ 1141	_____ 1140
	<b>100%</b>	<b>100%</b>

**WALKWAYS & SIDEWALKS**

How many **linear feet** of walkways and sidewalk did your typical home have?

\_\_\_\_\_ LF  
976

What **percent** of all your sidewalks and walkways were:

Poured concrete .....	_____ 977
Concrete paver .....	_____ 978
Asphalt .....	_____ 978a
Brick paver .....	_____ 979
Brick or clay tiles .....	_____ 979a
Natural stone .....	_____ 980
Crushed stone or gravel .....	_____ 981
Other _____ (PLEASE SPECIFY)	_____ 982
	<b>100%</b>

**FENCING AND LANDSCAPE WALLS**

What **percent** of your homes or living units had fencing / privacy walls or landscape / retaining walls installed on the lot as part of their sales contract?

	Fence / Privacy Wall	Landscape / Retaining Wall
SF <b>Detached</b> Houses .....	_____ % 987	_____ % 998
SF <b>Attached</b> Houses .....	_____ % 987a	_____ % 998a
Multifamily <b>Buildings</b> .....	_____ % 987b	_____ % 998b
	<b>Totals need not add to 100%</b>	

For houses with fencing or walls, what was the typical **length** of fence or wall? (per building if multifamily)

	Fence / Privacy Wall	Landscape / Retaining Wall
SF <b>Detached</b> Houses .....	_____ LF 988	_____ LF 999
SF <b>Attached</b> Houses .....	_____ LF 988a	_____ LF 999a
Multifamily <b>Buildings</b> .....	_____ LF 988b	_____ LF 999b
	<b>Totals need not add to 100%</b>	

What was the typical fence / wall **height**?

	Fence / Privacy Wall	Landscape / Retaining Wall
SF <b>Detached</b> Houses .....	_____ FT 989	_____ FT 1000
SF <b>Attached</b> Houses .....	_____ FT 989a	_____ FT 1000a
Multifamily <b>Buildings</b> .....	_____ FT 989b	_____ FT 1000b
	<b>Totals need not add to 100%</b>	

**FENCING AND LANDSCAPE WALL MATERIAL**

What **percent** of the fences or walls were:

	Fence / Privacy Wall	Landscape / Retaining Wall
Wood – vertical boards on alternating sides .....	_____ 990	
Wood – vertical boards on one side ..	_____ 991	
Wood with horizontal rails / boards ..	_____ 992	
Chain link or wire w/ steel posts .....	_____ 993	
Wrought iron .....	_____ 993b	
Ornamental steel .....	_____ 997d	
Aluminum .....	_____ 993c	
Plastic & wood fiber composite (Trex, etc.) ..	_____ 993a	
Vinyl, PVC, or other plastic .....	_____ 994	
Pre-cast concrete .....	_____ 997	
Poured concrete .....	_____ 997a	_____ 1004
Concrete retaining wall blocks (dry stacked) .....	_____ 997c	_____ 1003a
Mortared concrete block .....	_____ 997b	_____ 1003
Stone .....	_____ 995	_____ 1001
Brick .....	_____ 996	_____ 1002
Treated lumber or timbers .....	_____ 1006	
	<b>100%</b>	<b>100%</b>

**SWIMMING POOLS**

What **percent** of your homes included their own swimming pool as part of the sales contract?

SFD	SFA	MF BUILDINGS
_____ % 983	_____ % 983a	_____ % 983b

What was the typical size of the swimming pool?

Average size of SF <b>Detached</b> pool: _____ FT.	X	_____ FT.
984		985
Average size of SF <b>Attached</b> pool: _____ FT.	X	_____ FT.
984a		985a
Average size of Multifamily pool: _____ FT.	X	_____ FT.
984b		985b

**SWIMMING POOL MATERIAL**

What was the **primary method** used for constructing swimming pools?

	<b>(✓ one)</b>
Cast-in-place concrete .....	[ ] <sub>1</sub>
Shotcrete (gunnite) .....	[ ] <sub>2</sub>
Other _____ (PLEASE SPECIFY)	[ ] <sub>3</sub> 986

**HOMES FOR OLDER BUYERS**

What **percent** of your homes were:

Constructed in “active adult” or age-restricted communities .....	_____ 746
Sold to occupants over the age of 55 .....	_____ 747

**PRACTICES REGARDING RADON GAS**

Please answer these questions even if you used **NO** radon-reducing practices.

**SUB-SLAB OR SUB-MEMBRANE VENTILATION**

What **percent** of the houses you built had the following types of ventilation systems to reduce radon:

	BASEMENTS OR SLABS	CRAWL SPACES
<b>NO</b> venting installed to reduce radon .....	_____ 791	_____ 795
A rough-in for ventilation (not a complete system, e.g., capped pipe riser in basement) .....	_____ 788	
Passive stack ventilation .....	_____ 789	_____ 792
Fan-driven (active) depressurization .....	_____ 790	_____ 793
Foundation wall vents .....	_____ 794	_____ 794
	<b>100%</b>	<b>100%</b>

**SEALING METHODS OF HOUSES WITH SLAB OR BASEMENT FOUNDATIONS**

How do you seal your slabs? If you **don't** seal, ✓ **“NO slab sealing method used.”**

(✓ all that apply)

<b>NO</b> slab sealing method used .....	[ ] 803
Polyethylene or other membrane under slab .....	[ ] 796
Membrane on foundation walls below grade .....	[ ] 797
Caulk around slab, wall openings and slab joints .....	[ ] 798
Seal interior of foundation walls .....	[ ] 799
Locate sump access outside of basement .....	[ ] 800
Install air tight sump pit covers .....	[ ] 801
Other _____ (PLEASE SPECIFY)	[ ] 802

**RADON TESTING**

What **percent** of your homes were tested for radon? \_\_\_\_\_ %  
804

Of the houses tested for radon, what **percent** needed further work to reduce radon to less than 4 pCi/L? \_\_\_\_\_ %  
805

**PASSIVE vs. ACTIVE SUBSLAB VENTILATION**

If you installed **PASSIVE** sub-slab or sub-membrane ventilation (without a fan), what was the typical cost for you to include these features per home? **(✓ one)**

Less than \$200 .....	[ ] <sub>1</sub>
\$200 to \$299 .....	[ ] <sub>2</sub>
\$300 to \$399 .....	[ ] <sub>3</sub>
\$400 to \$499 .....	[ ] <sub>4</sub>
\$500 to \$599 .....	[ ] <sub>5</sub>
\$600 to \$799 .....	[ ] <sub>6</sub>
\$800 or more .....	[ ] <sub>7</sub> v114

If you installed **ACTIVE** sub-slab or sub-membrane ventilation (with a fan), what was the typical cost for you to include these features per home? **(✓ one)**

Less than \$450 .....	[ ] <sub>1</sub>
\$450 to \$549 .....	[ ] <sub>2</sub>
\$550 to \$649 .....	[ ] <sub>3</sub>
\$650 to \$749 .....	[ ] <sub>4</sub>
\$750 to \$849 .....	[ ] <sub>5</sub>
\$850 to \$1049 .....	[ ] <sub>6</sub>
\$1050 or more .....	[ ] <sub>7</sub> v120

**PLUMBING FIXTURES**

What was the typical **number** of plumbing fixtures installed in each your homes?

	SFD Starter ↓	SFD Move-up ↓	SFD Luxury ↓	SFA Per UNIT ↓	MF Per UNIT ↓
Lavatory sinks .....	v1	v10	v19	v28	v37
Bathtubs (both standard and whirlpool).....	v2	v11	v20	v29	v38
Separate shower Stalls	v3	v12	v21	v30	v39
Toilets .....	v4	v13	v22	v31	v40
Bidets .....	v5	v14	v23	v32	v41
Kitchen sinks .....	v6	v15	v24	v33	v42
Bar sinks .....	v7	v16	v25	v34	v43
Laundry tubs / sinks .	v8	v17	v26	v35	v44
Other (PLEASE SPECIFY)	v9	v18	v27	v36	v45

**KITCHEN SINK TYPE**

What **percent** of your kitchen sinks were:

Drop-in (self-rimming, overmount) .....	v95
Undermount (sub-mount or under-counter) .....	v96
Other _____ (PLEASE SPECIFY)	v97
	<b>100%</b>

**KITCHEN SINK MATERIAL**

What **percent** of your kitchen sinks installed were:

Stainless steel .....	v58
Enameled cast iron .....	v59
Enameled steel (include Americast®) .....	v60
Cultured marble .....	v61
Solid-surface (Corian®, Swanstone®, etc.) .....	v62
Granite / Stone (Moenstone®, Silgranit®, Kindred Granite®, etc.) .....	v62c
Acrylic .....	v62a
Other _____ (PLEASE SPECIFY)	v62b
	<b>100%</b>

**KITCHEN SINK BASINS**

What **percent** of your kitchen sinks had the following number of basins?

Single basin .....	v90
Double basin .....	v91
Triple basin .....	v92
Other _____ (PLEASE SPECIFY)	v93
	<b>100%</b>

**KITCHEN SINK FAUCETS**

What **percent** of your kitchen sink faucets had the following control types:

Single control (handle or lever) .....	v201
Two controls (one for hot and one for cold).....	v202
	<b>100%</b>

What **percent** of your kitchen sink faucets had the following finishes:

Chrome .....	v203
Brass / Gold.....	v204
Bronze (oil rubbed, polished, brushed, etc.).....	v205
Solid color (almond, white, black, biscuit, etc.).....	v206
Nickel / Pewter .....	v207
Stainless steel .....	v208
Other _____ (PLEASE SPECIFY)	v209
	<b>100%</b>

**LAVATORY SINK TYPE**

What **percent** of the lavatory sinks you installed were:

One-piece sink and countertop .....	v46
Drop-in (self-rimming, overmount) .....	v47
Wall-hung .....	v48
Pedestal .....	v50
Undermount (sub-mount or under-counter) .....	v49
Vessel .....	v49a
	<b>100%</b>

**LAVATORY SINK MATERIAL**

What **percent** of all the lavatory sinks you installed were:

Vitreous china (ceramic) .....	v51
Enameled cast iron .....	v52
Enameled steel (include Americast®) .....	v53
Cultured marble .....	v54
Coated fiberglass .....	v55
Acrylic .....	v56
Solid-surface (Corian®, Swanstone®, etc.) .....	v57
Other _____ (PLEASE SPECIFY)	v57a
	<b>100%</b>

**LAVATORY SINK FAUCETS**

What **percent** of your lavatory sink faucets had the following control types:

Single control (handle or lever) .....	v211
Two controls (one for hot and one for cold).....	v212
	<b>100%</b>

What **percent** of your lavatory sink faucets had the following finishes:

Chrome .....	v213
Brass / Gold.....	v214
Bronze (oil rubbed, polished, brushed, etc.).....	v215
Solid color (almond, white, black, biscuit, etc.).....	v216
Nickel / Pewter .....	v217
Stainless steel .....	v218
Other _____ (PLEASE SPECIFY)	v219
	<b>100%</b>

**BATHTUB AND WHIRLPOOL SURROUNDS**

What **percent** of the separate bathtubs and whirlpool baths you installed had **site-constructed** surrounds of the following materials?

NO separate bathtub surrounds were constructed	_____ %	v76
Ceramic tile	_____ %	v71
Marble, slate, or other natural stone	_____ %	v71a
Solid surface (e.g., Corian <sup>®</sup> , Avonite <sup>®</sup> , etc.)	_____ %	v72
High-pressure laminate (e.g., Formica, Wilsonart)	_____ %	v73
Fiberglass / Plastic	_____ %	v73a
Cultured marble	_____ %	v74
Other _____	_____ %	v75
(PLEASE SPECIFY)		
<b>100%</b>		

**BATHTUBS (NON-WHIRLPOOL)**

What **percent** of all the non-whirlpool bathtubs you installed were:

**Tub / Shower Combination**

Coated fiberglass, one-piece	_____	v63
Coated fiberglass, multi-piece	_____	v63m
Acrylic, one-piece	_____	v64
Acrylic, multi-piece	_____	v64m
Other _____	_____	v64a
(PLEASE SPECIFY)		

**Tub only**

Enameled cast iron	_____	v65
Enameled steel	_____	v66
Cultured marble	_____	v67
Coated fiberglass	_____	v68
Acrylic	_____	v69
Solid-surface (e.g., Swanstone <sup>®</sup> , Avonite <sup>®</sup> , etc.)	_____	v70
Other _____	_____	v70a
(PLEASE SPECIFY)		
<b>100%</b>		

**WHIRLPOOL BATHTUBS**

What **percent** of your homes had whirlpool baths?

	SFD Starter ↓	SFD Move-up ↓	SFD Luxury ↓	SFA Units ↓	MF Units ↓
Whirlpool bathtubs	_____	_____	_____	_____	_____
	v2w	v11w	v20w	v29w	v38w

What **percent** of all the whirlpool baths you installed were:

**Tub / Shower Combination**

Coated fiberglass, one-piece	_____	v63w
Coated fiberglass, multi-piece	_____	v63wm
Acrylic, one-piece	_____	v64w
Acrylic, multi-piece	_____	v64wm
Other _____	_____	v64aw
(PLEASE SPECIFY)		

**Tub only**

Enameled cast iron	_____	v65w
Enameled steel	_____	v66w
Cultured marble	_____	v67w
Coated fiberglass	_____	v68w
Acrylic	_____	v69w
Solid-surface (e.g., Swanstone <sup>®</sup> , Avonite <sup>®</sup> , etc.)	_____	v70w
Other _____	_____	v70aw
(PLEASE SPECIFY)		
<b>100%</b>		

**TUB / SHOWER DOORS**

What **percent** of the tubs, showers, and whirlpool baths you installed had shower doors?

Bathtubs (non-whirlpool)	_____	v231
Showers	_____	v232
Whirlpool baths	_____	v233
<b>Totals need not add to 100%</b>		

**SEPARATE SHOWER STALLS**

What **percent** of all the shower stalls you installed were:

**Fabricated on-site from:**

Ceramic tile	_____	v77
Marble, slate, or other natural stone	_____	v77a
Solid surface (e.g., Corian <sup>®</sup> , Avonite <sup>®</sup> , etc.)	_____	v78
High pressure laminate (e.g., Formica <sup>®</sup> , Wilsonart <sup>®</sup> )	_____	v79
Cultured marble	_____	v80
Other _____	_____	v81
(PLEASE SPECIFY)		

**Manufactured units of:**

Coated fiberglass, one-piece	_____	v82
Coated fiberglass, multi-piece	_____	v82m
Acrylic, one-piece	_____	v83
Acrylic, multi-piece	_____	v83m
Other _____	_____	v84
(PLEASE SPECIFY)		
<b>100%</b>		

**SHOWER BASES**

What **percent** of the fabricated on-site showers you installed had manufactured bases or pans?

_____	v256
-------	------

**BATHTUB / SHOWER FAUCETS**

What **percent** of your bathtub / shower faucets used the following control types:

Single control, pulled or lifted to turn on water	_____	v221
Single control, twisted to turn on water	_____	v222
Two controls (one for hot and one for cold)	_____	v223
<b>100%</b>		

What **percent** of your bathtub / shower faucets had the following finishes:

Chrome	_____	v224
Brass / Gold	_____	v225
Bronze (oil rubbed, polished, brushed, etc.)	_____	v226
Solid color (almond, white, black, biscuit, etc.)	_____	v227
Nickel / Pewter	_____	v228
Stainless steel	_____	v229
Other _____	_____	v230
(PLEASE SPECIFY)		
<b>100%</b>		

**STEAM GENERATORS**

What **percent** of all the tubs, showers, and whirlpool baths you installed had Steam Generators?

Bathtubs	_____	v234
Showers	_____	v235
Whirlpools	_____	v236

**SHOWERHEADS**

What **percent** of the bathtubs and showers you installed had showerheads of the following types:

Standard / Fixed showerhead .....	_____	v249
Hand-held showerhead .....	_____	v250
Massaging showerhead .....	_____	v251
Thermostatic valves .....	_____	v252
Body sprays .....	_____	v253
Steam head .....	_____	v254
Other .....	_____	v255
(PLEASE SPECIFY)		

What **percent** of the bathtubs and showers you installed had the following:

More than 1 Standard showerhead .....	_____	v257
More than 1 Hand-held showerhead .....	_____	v258
<b>Totals need not add to 100%</b>		

**TOILETS**

What **percent** of the toilets installed in your new homes were:

One piece (bowl and tank one casting) .....	_____	v85_1
Two piece .....	_____	v85_2
<b>100%</b>		

What **percent** of the toilets had the following bowl styles?

Elongated .....	_____	v85_3
Standard .....	_____	v85_4
<b>100%</b>		

What **percent** of your toilets were dual flush?

Percent of toilets with Dual Flush .....	_____	v85_5
--	-------	-------

**TOILET BRANDS**

Of all the toilets you installed last year, what **percent** were the following brands?

	Percent
American Standard .....	_____ v85
Briggs .....	_____ v85a
Crane .....	_____ v85b
Eljer .....	_____ v85c
Gerber .....	_____ v86
Kohler .....	_____ v86a
Mansfield .....	_____ v86b
Sterling .....	_____ v86c
Toto .....	_____ v87
Universal-Rundle .....	_____ v87a
St. Thomas Creations .....	_____ v87b
Other .....	_____ v87c
(PLEASE SPECIFY)	
<b>100%</b>	

**MOUNTED BATH ACCESSORIES**

How many of the following are installed in your typical bathroom?

Towel bar .....	_____	v241
Towel ring .....	_____	v242
Robe hook .....	_____	v243
Toilet paper holder .....	_____	v244
Toothbrush/Tumbler holder .....	_____	v245
Shelf .....	_____	v246
Soapdish .....	_____	v247
Grab bars .....	_____	v248

**APPLIANCES**

**RANGES, COOKTOPS & OVENS**

What **percent** of your homes were equipped with ranges or cooktops and ovens that were:

	SFD	SFA	MF UNITS
Freestanding .....	_____ a1	_____ a6	_____ a11
Slide-in .....	_____ a2	_____ a7	_____ a12
Drop-in .....	_____ a3	_____ a8	_____ a13
Cooktop & wall oven(s) .....	_____ a4	_____ a9	_____ a14
<b>NO</b> range / cooktop / oven .....	_____ a5	_____ a10	_____ a15
<b>100%      100%      100%</b>			

**WALL OVEN CONFIGURATION**

What **percent** of your new homes with built-in wall ovens had:

A single wall oven .....	_____	a34
Two separate wall ovens .....	_____	a35
Stacked double ovens in a single unit .....	_____	a36
<b>100%</b>		

**BURNER TYPE**

What **percent** of the cooking appliances you installed had the following types of burners?

	RANGES	COOKTOPS
<b>Electric</b>		
Halogen burner / smoothtop .....	_____ a22	_____ a28
Smoothtop, not halogen .....	_____ a23	_____ a29
Conventional heat coils .....	_____ a24	_____ a30
Modular units for grill .....	_____ a25	_____ a31
<b>Gas</b>		
Sealed gas burners .....	_____ a26	_____ a32
Conventional gas .....	_____ a27	_____ a33
<b>100%</b>		<b>100%</b>

**FUEL TYPE**

What **percent** of the equipment you installed used the following fuel types?

	RANGES	COOKTOPS	WALL OVENS	WATER HEATERS
Gas .....	_____ a16	_____ a18	_____ a18a	_____ a20
Electric .....	_____ a17	_____ a19	_____ a19a	_____ a21
Oil .....	_____	_____	_____	_____ a21a
<b>100%</b>		<b>100%</b>	<b>100%</b>	<b>100%</b>

**MICROWAVE OVENS**

What **percent** of your homes were equipped with microwave ovens that were:

	SFD	SFA	MF UNITS
Built-in with range .....	_____ a58	_____ a62	_____ a66
Built into cabinet .....	_____ a58a	_____ a62a	_____ a66a
Over-the-range .....	_____ a59	_____ a63	_____ a67
Countertop or hung under cabinets .....	_____ a60	_____ a64	_____ a68
Top unit of double wall oven .....	_____ a60a	_____ a64a	_____ a68a
<b>NO</b> microwave oven ....	_____ a61	_____ a65	_____ a69
	<b>100%</b>	<b>100%</b>	<b>100%</b>

**REFRIGERATORS**

What **percent** of your homes were equipped with refrigerators that were:

	SFD	SFA	MF UNITS
Freezer on top, refrigerator below .....	_____ a70	_____ a74	_____ a78
Refrigerator on top, freezer below .....	_____ a71	_____ a75	_____ a79
Side-by-side refrigerator / freezer ...	_____ a72	_____ a76	_____ a80
Refrigerator with no freezer .....	_____ a72a	_____ a76a	_____ a80a
<b>NO</b> refrigerator .....	_____ a73	_____ a77	_____ a81
	<b>100%</b>	<b>100%</b>	<b>100%</b>

**DISHWASHERS**

What **percent** of your homes were equipped with:

	SFD	SFA	MF UNITS
Dishwashers with timing cycles .....	_____ a82	_____ a85	_____ a88
Dishwashers with cleaning sensors .....	_____ a83	_____ a86	_____ a89
<b>NO</b> dishwasher .....	_____ a84	_____ a87	_____ a90
	<b>100%</b>	<b>100%</b>	<b>100%</b>

**CLOTHES WASHERS**

What **percent** of your homes were equipped with clothes washers that were:

	SFD	SFA	MF UNITS
Top loading washing machine .....	_____ a91	_____ a94	_____ a97
Front loading washing machine .....	_____ a92	_____ a95	_____ a98
<b>NO</b> washing machine ...	_____ a93	_____ a96	_____ a99
	<b>100%</b>	<b>100%</b>	<b>100%</b>

**CLOTHES DRYERS**

What **percent** of your homes were equipped with clothes dryers that were:

	SFD	SFA	MF UNITS
Electric dryer .....	_____ a100	_____ a103	_____ a106
Gas powered dryer .....	_____ a101	_____ a104	_____ a107
<b>NO</b> clothes dryer .....	_____ a102	_____ a105	_____ a108
	<b>100%</b>	<b>100%</b>	<b>100%</b>

**OTHER APPLIANCES / AMENITIES**

What **percent** of your homes were equipped with the following appliances?

	SFD	SFA	MF UNITS
Garbage disposal .....	_____ a113	_____ a117	_____ a121
Trash compactor .....	_____ a114	_____ a118	_____ a122
Hot water dispenser .....	_____ a115	_____ a119	_____ a123
Central vacuum – full system .....	_____ a116	_____ a120	_____ a124
Central vacuum – pre-pipe only .....	_____ a141	_____ a142	_____ a143
Elevator .....	_____ a144	_____ a145	_____ a146
Standby generator .....	_____ a147	_____ a148	_____ a149
Water softener .....	_____ a147a	_____ a148a	_____ a149a
Hot water recirculation piping .....	_____ a147b	_____ a148b	_____ a149b
Code required fire sprinkler system .....	_____ a147d	_____ a148d	_____ a149d
Non-code required fire sprinkler system .....	_____ a147c	_____ a148c	_____ a149c
Standby generator .....	_____ a147e	_____ a148e	_____ a149e
	<b>Totals need not add to 100%</b>		

**FIRE SPRINKLER SYSTEMS**

What **percent** of your fire sprinkler piping was:

	SFD & SFA	MF
CPVC .....	_____ s101	_____ s106
PEX .....	_____ s102	_____ s107
Steel/Iron .....	_____ s103	_____ s108
Copper .....	_____ s104	_____ s109
Other _____ (PLEASE SPECIFY)	_____ s105	_____ s110
	<b>100%</b>	<b>100%</b>

What **percent** of your fire sprinkler systems were:

	SFD & SFA	MF
Stand-alone fire sprinkler systems .....	_____ s111	_____ s113
Combined plumbing and fire sprinkler systems .....	_____ s112	_____ s114
	<b>100%</b>	<b>100%</b>

**STANDBY GENERATORS**

What **percent** of your standby generators were:

Natural gas .....	_____ g106
Propane/LP gas .....	_____ g107
Gasoline .....	_____ g108
Diesel .....	_____ g109
Other .....	_____ g110
	<b>100%</b>

What **percent** of your standby generators were:

Less than 8 KW .....	_____ g114
8 KW to 12 KW .....	_____ g115
13 KW or more .....	_____ g116
	<b>100%</b>

**WATER PIPES**

What percent of your homes' **water service** (from the street to the house); **distribution** (hot/cold water plumbing within the house); **waste** (DWV piping that drains water from the sinks, toilets, etc) pipe was the following types:

	WATER SERVICE	DISTRIBUTION	WASTE
Copper .....	_____ v210s	_____ v210d	_____ v210w
PVC or CPVC .....	_____ v211s	_____ v211d	_____ v211w
Polyethylene (PE) ...	_____ v212s		
PEX (Cross linked PE)	_____ v213s	_____ v213d	
PEX-AL-PEX .....	_____ v214s	_____ v214d	
Steel / Cast iron .....	_____ v215s		_____ v215w
ABS .....			_____ v216w
	<b>100%</b>	<b>100%</b>	<b>100%</b>

If you used PEX **plumbing** systems, what percent of the piping, fittings, and manifolds were the following brands:

	PIPING	FITTINGS	MANIFOLDS
Bow .....	_____ v217p	_____ v217f	_____ v217m
IPEX .....	_____ v218p	_____ v218f	_____ v218m
JM Eagle .....	_____ v219p	_____ v219f	_____ v219m
NIBCO .....	_____ v220p	_____ v220f	_____ v220m
Rehau .....	_____ v221p	_____ v221f	_____ v221m
Sioux Chief .....		_____ v222f	_____ v222m
Uponor (formerly Wisbo)	_____ v223p	_____ v223f	_____ v223m
Viega (formerly Vanguard)	_____ v224p	_____ v224f	_____ v224m
Watts .....	_____ v225p	_____ v225f	_____ v225m
Zurn .....	_____ v226p	_____ v226f	_____ v226m
Don't know .....	_____ v227p	_____ v227f	_____ v227m
Other .....	_____ v228p	_____ v228f	_____ v228m
	<b>100%</b>	<b>100%</b>	<b>100%</b>

What percent of the PEX **plumbing** systems you installed were:

	SFD Starter	SFD Move-up	SFD Luxury	SFA Units	MF Units
Trunk & Branch .	_____	_____	_____	_____	_____
Home Run .....	_____	_____	_____	_____	_____
Zone (remote manifold).....	_____	_____	_____	_____	_____
Other .....	_____	_____	_____	_____	_____
Don't know .....	_____	_____	_____	_____	_____
	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

What percent of the **fittings** for your PEX **plumbing** systems were:

	SFD Starter	SFD Move-up	SFD Luxury	SFA Units	MF Units
Engineered plastic .	_____	_____	_____	_____	_____
Copper / Brass .....	_____	_____	_____	_____	_____
Other .....	_____	_____	_____	_____	_____
Don't know .....	_____	_____	_____	_____	_____
	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**HYDRONIC RADIANT HEAT**

What percent of your homes had **hydronic radiant heat** installed in:

	SFD Starter	SFD Move-up	SFD Luxury	SFA Units	MF Units
None .....	_____	_____	_____	_____	_____
Less than 25% of square footage ...	_____	_____	_____	_____	_____
25-50% of square footage ...	_____	_____	_____	_____	_____
50% or more square footage ...	_____	_____	_____	_____	_____
	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

If you used PEX **radiant** systems, what percent of the piping, manifolds, and controls were the following brands:

	PIPING	MANIFOLDS	CONTROLS
Bow .....	_____ v232p	_____ v232m	_____ v232c
Caleffi .....		_____ v233m	
Heat Link .....	_____ v234p	_____ v234m	_____ v234c
Heat-Timer .....			_____ v235c
Honeywell .....		_____ v236m	_____ v236c
IPEX .....	_____ v237p	_____ v237m	_____ v237c
JM Eagle .....	_____ v238p	_____ v238m	_____ v238c
Rehau .....	_____ v239p	_____ v239m	_____ v239c
Roth .....	_____ v240p	_____ v240m	_____ v240c
Tekmar .....			_____ v241c
Uponor (formerly Wisbo)	_____ v242p	_____ v242m	_____ v242c
Viega (formerly Vanguard)	_____ v243p	_____ v243m	_____ v243c
Watts .....	_____ v244p	_____ v244m	_____ v244c
Zurn .....	_____ v245p	_____ v245m	_____ v245c
Don't know .....	_____ v246p	_____ v246m	_____ v246c
Other .....	_____ v247p	_____ v247m	_____ v247c
	<b>100%</b>	<b>100%</b>	<b>100%</b>

**ALTERNATIVE ENERGY SYSTEMS**

In the **next five years**, how likely is your company to do **any** of the following for your homes:

	Not Likely	1	2	3	4	5	Very Likely
Offer solar electric as standard equipment .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2052
Offer solar electric as an option to home buyers .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2053
Investigate alternatives in solar electric .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2054
Offer solar water heating as standard equipment .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2055
Offer solar water heating as an option to home buyers .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2056
Investigate alternatives in solar water heating .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2057

What **percent** of your homes had the following solar energy systems?

Solar electric (photovoltaic, or PV) system .....	_____	2026
Solar domestic hot water .....	_____	2027
Solar pool heater .....	_____	2028
<b>Total need not add to 100%</b>		

What **percent** of your solar electric systems (PV) were:

Flat panel collectors installed on the roof .....	_____	2029
Flat panel collectors installed on supports attached to the ground .....	_____	2030
Integrated (BIPV) into the roofing or other element of the home .....	_____	2031
Another type of PV system .....	_____	2032
<b>100%</b>		

How did you offer solar electric (PV) and solar water heating systems?

	Solar Electric System (PV)	Solar Domestic Hot Water
Standard on some or all of our homes ... [ ]	[ ]	1
An option we actively promoted .....	[ ]	2
Installed only at home buyer's request .. [ ]	[ ]	3
Did not offer/consider offering PV .....	[ ]	4
	2033	2034

Who was your **primary installer** for each of the following systems?

	Solar Electric System (PV)	Solar Domestic Hot Water
Solar contractor .....	[ ]	1
We did (builder) .....	[ ]	2
Electrician or plumber .....	[ ]	3
Utility company .....	[ ]	4
Other contractor .....	[ ]	5
	2035	2036

Which sources provided incentives to offset some or all of the cost of solar electric (PV) or solar water heating systems?

We paid in full—no incentives .....	[ ]	2037
Federal government .....	[ ]	2038
State government .....	[ ]	2039
Local government .....	[ ]	2040
Public utility .....	[ ]	2041
Another source offered incentives .....	[ ]	2042

Which of the following were true about your typical solar electric installation on new homes:

Connected to a utility grid .....	[ ]	2044
Had battery storage .....	[ ]	2045
Home was completely “off the grid” .....	[ ]	2046
Had easy-to-read energy monitor .....	[ ]	2047
“Net metering” enabled .....	[ ]	2048

What were the capacities of your solar electric systems?

Less than 3 KW .....	_____	2049
3 KW to 5 KW .....	_____	2050
More than 5 KW .....	_____	2051
<b>100%</b>		

## CONFIGURATION OF HVAC SYSTEMS

What **percent** of your homes (or multifamily units) had the following **primary heating systems**:

Standard heat pump w/ electric backup heat .....	_____	h101
Standard heat pump w/ gas or propane backup .....	_____	h102
Geothermal heat pump .....	_____	h103
Gas or propane furnace or boiler .....	_____	h104
Oil furnace or boiler .....	_____	h105
Electric furnace, baseboard, or radiant .....	_____	h106
No primary heating system .....	_____	h107
<b>100%</b>		

## HEATING DISTRIBUTION SYSTEMS

What **percent** of your homes with primary heating systems had the following **heating distribution systems**:

Ductless Heat Pump .....	_____	h111
Forced Air—one zone only .....	_____	h112
Forced Air—two or more zones .....	_____	h113
Hydronic—radiant floor .....	_____	h114
Hydronic—baseboard or radiators .....	_____	h115
Another type of distribution system .....	_____	h116
<b>100%</b>		

## AIR CONDITIONING SYSTEMS

What **percent** of your homes had the following types of air conditioning systems:

No air conditioning system installed .....	_____	h121
Evaporative cooler .....	_____	h122
Single AC unit .....	_____	h123
Two or more AC units .....	_____	h124
Ductless heat pump or AC .....	_____	h125
<b>100%</b>		

## HVAC SYSTEM FEATURES

What **percent** of your homes had the following as part of their HVAC systems:

High performance air cleaner (HEPA, electronic) .....	_____	h131
Humidifier .....	_____	h132
Heat Recovery Ventilators (HRV, ERV) .....	_____	h133
Non-energy-recovery fresh air exchangers .....	_____	h134
<b>Total need not add to 100%</b>		

## EFFICIENCY RATINGS OF WARM AIR FURNACES

Of all the furnaces installed in the homes your firm built, what **percent** had efficiency ratings of:

Less than 78% .....	_____	h141
78% to 79.9% .....	_____	h142
80% to 89.9% .....	_____	h143
90% to 95% .....	_____	h144
95.1% or greater .....	_____	h145
Don't know .....	_____	h146
<b>100%</b>		

## AIR CONDITIONER EFFICIENCY

What **percent** of air conditioning systems and heat pumps installed in your home had SEER ratings of:

Less than 13 .....	_____	h151
13.0 to 14.9 .....	_____	h152
15.0 to 16.9 .....	_____	h153
17.0 to 18.9 .....	_____	h154
19.0 to 20.9 .....	_____	h155
21 or higher .....	_____	h156
Don't know .....	_____	h157
<b>100%</b>		

**TYPE OF STAIRS**

Which of the following describes the **typical** stairs you use?

	TO BASEMENT	TO UPPER STORIES
Prefabricated .....	[ ]	[ ] 1
Fabricated on-site .....	[ ] 501a	[ ] 2 501b

**MATERIAL OF STAIRS**

What materials did you use in your **typical** stairs:

	TO BASEMENT	TO UPPER STORIES
Softwood lumber .....	[ ]	[ ] 1
Hardwood lumber .....	[ ]	[ ] 2
Plywood .....	[ ]	[ ] 3
OSB .....	[ ]	[ ] 4
Particleboard .....	[ ]	[ ] 5
Metal or other .....	[ ] 503a	[ ] 6 503b

**RISER MATERIAL**

Softwood lumber .....	[ ]	[ ] 1
Hardwood lumber .....	[ ]	[ ] 2
Plywood .....	[ ]	[ ] 3
OSB .....	[ ]	[ ] 4
Particleboard .....	[ ]	[ ] 5
Metal or other .....	[ ]	[ ] 6
MDF .....	[ ] 504a	[ ] 7 504b

**STRINGER MATERIAL**

Softwood lumber .....	[ ]	[ ] 1
Hardwood lumber .....	[ ]	[ ] 2
Plywood .....	[ ]	[ ] 3
Metal or other .....	[ ]	[ ] 4
LVL .....	[ ] 502a	[ ] 5 502b

**STRUCTURED WIRING AND HOME NETWORKS**

Structured wiring, or “home networks,” consist typically of a central distribution panel that connects cable for audio / video signals (coaxial cable, or RG6) and wiring for data / voice outlets throughout the house.

What **percent** of the homes you built in 2008 had structured wiring, or “home networks” with outlets in 3 rooms or more?

\_\_\_\_\_ %  
a140

**HOME ELECTRONICS**

What **percent** of your homes were equipped with the following home electronics systems?

	Percent of HOMES
Intercom / Entrance phone .....	_____ a125
Video entrance phone .....	_____ a126
Whole home control or automation system .....	_____ a127
Security system – <b>not</b> monitored by protection service .....	_____ a128
Security system – monitored by protection service .....	_____ a129
Lighting control system .....	_____ a130
Programmable thermostat .....	_____ a131
Communicating thermostat .....	_____ a132
Monitored fire / toxic gas alarm system .....	_____ a133
Whole-house audio system .....	_____ a134
Whole-house video access .....	_____ a135
Built-in home theater .....	_____ a136
Electrical load-monitoring / control system .....	_____ a137
Multi-line phone system .....	_____ a138
<b>Total need not add to 100%</b>	

**UPDATES**

Would you like to receive periodic communications on NAHB Research Center testing results and programs via e-mail?

No [ ]<sub>1</sub> Yes [ ]<sub>2</sub> a160

(PLEASE SPECIFY E-MAIL ADDRESS)

**PLEASE SELECT ONE OF THE FOLLOWING GIFTS:**

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Embroidered Shirt (M)    | <input type="checkbox"/> Embroidered Jacket (M)    | <input type="checkbox"/> Silver Tone Business Card Case                  |
| <input type="checkbox"/> Embroidered Shirt (L)    | <input type="checkbox"/> Embroidered Jacket (L)    | <input type="checkbox"/> 100’ Contractor Measuring Tape                  |
| <input type="checkbox"/> Embroidered Shirt (XL)   | <input type="checkbox"/> Embroidered Jacket (XL)   | <input type="checkbox"/> Stainless Steel Thermos                         |
| <input type="checkbox"/> Embroidered Shirt (XXL)  | <input type="checkbox"/> Embroidered Jacket (XXL)  | <input type="checkbox"/> Swiss Army Knife                                |
| <input type="checkbox"/> Embroidered Shirt (XXXL) | <input type="checkbox"/> Embroidered Jacket (XXXL) | <input type="checkbox"/> Random Gift (inventories too low to list items) |

**Thank You for Your Time and Cooperation!**

Completing and returning this questionnaire entitles you to a free report summarizing the results from this survey nationally with a special tabulation of respondents from your area. Reports will be available late 2009. Please call Joanne McAlpin at 1-800-638-8556 ext. 6306 to request your copy.

**Returning the Questionnaire**

- If your name or address differs from the address label, please make appropriate corrections (this will be used to send your gift)
- If you’d like to participate in online surveys and earn more free gifts, please include your email address above
- Place your completed survey in the postage-paid return envelope (see center of survey) and drop it in the mail