1986 Hart Closet Business Plan compiled by Bill Crane with information also provided by Tom Prevette, Rits Goto, Fred Pneuman, Fraser Cowie & Greg Hart



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INTRODUCTION

The following pages provide a précis of the Hart Closet concept, a simple idea with far reaching consequences in the construction marketplace.

Properly launched and supported financially, the Hart Closet would, in a relatively brief time frame, effect a fundamental change in a multi-billion dollar segment of the North American construction market.

The Hart Closet is, quite simply, a time-saving, labor-saving, cost-saving approach to the construction of a component incorporated in virtually all residential, commercial, industrial, modular, institutional and government structures built each year in North America.

Over and above the savings in time and money, the Hart Closet also offers a dramatic improvement in the quality and buyer appeal of the finished product.

We invite you to review the material that follows and await your comments with interest.

BACKGROUND

From Out of the Closet

The closet, or its equivalent, has been an important part of man's home environment from the cave to the time he began living in permanent structures.

Closets have served as repositories for food, weapons, armor, clothing, tools and a variety of other items which man wished to store out of the way but, at the same time, keep close at hand and easily accessible.

It is only recently that closets have been "discovered" and promoted as sales features to prospective home buyers. In recent years, a variety of organizer systems have been introduced, and custom closet design services have sprung up in most major metropolitan areas of North America (1).

Unlike the Hart Closet, the products or services these companies offer are aimed at a redesign of the space within a closet rather than with the design of the closet structure itself.

The collective impact of their efforts, however, has helped prepare the market for the introduction of the Hart Closet.

They have dramatically increased the awareness of closets among consumers, and, more importantly, among architects and contractors as well.

THE CLOSET MARKET

A Potential Calculated In Billions of Dollars

In North America, the average single family residence, whether detached, condominium, module, condo or town house, contains seven closets. Individual units in apartment buildings incorporate, on average, five closets.

In the single year of 1986, more than 12 million closets were built in new residential construction in the U. S. alone (2).

The majority of residential closets range in size from 2-feet to 8~feet. Assuming an average size of 4-feet, by far the most popular closet size, and an average cost of \$500 for a closet of that size, the potential market for closets in the US residential construction alone is more than \$6 billion annually.

Significant Savings Potential

The Hart Closet takes a totally new approach to closet design, materials and construction technique. This new approach will reduce the cost of closet construction by a factor of 7% - 11%, depending upon prevailing labor costs in different geographic areas across North America (3).

These cost reductions translate into a potential savings to the construction industry of the U. S. of approximately half a billion dollars each year. They also suggest a total potential market for the Hart Closet of more than \$6 billion annually in US residential construction alone.

Commercial construction will increase the size of that market even further.

The Hart Closet

A Better Product at a Lover Price

The Hart Closet is a one piece unit made of a foamed urethane/fiberglass laminate supported by steel studs. It requires none of the time consuming, labor intensive functions of traditional lumber framing, dry-wall process, painting and finishing essential to the completion of conventional stick-built closets.

The materials in the Hart Closet have a flame rating superior to the flame rating of the wood and drywall used in conventionally built closets. Studies indicate that the cost of Hart Closets will be, on average, 7% - 11% lower than the cost of conventional closets as well.

These savings will be generated by drastic reductions in labor costs, by the quick and easy installation of the Hart Closet, and by the impervious surfaces of the materials used which resist construction site damage and marking far better than traditional drywall and painted materials.

Onsite installation of a Hart Closet requires less than one hour.

PRODUCT APPEAL

Financial, Operational, Aesthetic

The Financial Appeal of the Hart Closet is immediately apparent in the 7% - 11% savings it will provide the contractor in closet building costs.

Additional savings will be derived from other areas. Use of the Hart Closet will accelerate the overall construction process and result in quicker payback of construction loans and reduced interest payments for the contractor.

The Hart Closet requires no sawing and only minimal nailing and is therefore a quicker, cleaner, safer process which will result in less "down time" for clean up or injury on site. But the primary area of savings will be the dramatic reduction of labor costs at the construction site. The savings in this area alone are so extensive that they more than off-set the costs of the higher quality materials used in the manufacture of the Hart Closet.

<u>Operational</u> advantages of the Hart Closet are many and varied. Because they are factory produced under ideal working conditions, they incorporate a consistently higher degree of accuracy in angles, joins, and studs than stick-built closets constructed on-site where working conditions vary.

The result is truer walls and corners, and quick and easy installation. The Hart closet substantially reduces the need for sawing, nailing, screwing and drilling in the framing stages, and is therefore a cleaner, safer way of building.

Further, because Hart Closets are delivered to construction sites as completed units, inventory is much more easily controlled and "shrinkage" of construction materials from the jobsite is reduced.

<u>Aesthetics</u>; Incorporated into the Hart Closet are a number of aesthetically appealing features which speak directly to the interests of the potential home purchaser. Indeed, with these features, the Hart Closet could well become that "extra something" that accelerates or clinches the sale of a new residential home or a commercial unit.

Because the Hart Closet is currently a laminate of foamed urethane and fiberglass, the range of colors and textures in which it can be produced is virtually limitless. However, the Hart Closet can be made of a variety of many materials from various slurries and plastics to steel.

The wall surfaces of the closet are not only exceptionally strong, but also have a resistance to marking, scuffing or denting, being far superior to the drywall products used in traditional closet construction. The tough impervious surface (smooth or textured) is extremely easy to clean. If the color is not just what the home buyer wants, the Hart Closet surface/s will accept paint as well.

In addition to these built-in features, the Hart Closet will soon incorporate a variety of optional snap-in design accessories which will enable the home owner to "shape the space" within the closet to their own particular needs.

The accessories, which comprise the Hart Closet "System", are designed in such a way that the home owner can remove or reposition individual elements as his need for storage space changes.

PRODUCT PRICE & POSITIONING

The tremendous size of the potential market for the Hart Closet dictates that initial sales efforts should be targeted exclusively toward major construction companies.

The primary effect of this strategy will be a minimal cost of sale on a per unit basis and a significantly higher margin of profit through the critical startup period.

Factors of Influence

There are a number of factors which have a bearing on the cost of closet construction. They will also have a bearing on pricing strategies of the Hart Closet.

Closets in residential structures range in size from 2 feet to 8 feet. The time required to build and finish closets of different sizes ranges from 14 to 19 hours.

There is only a slight difference in material costs for traditional closets of different sizes. They range from about \$50 for a 2-foot closet to about \$75 for an 8-foot closet.

The cost of labor varies across North America, and those.cost variances are reflected in the cost of construction of traditional closets.

Hourly wages for example: TX Labor: \$21/hour WA Labor: \$27/hour

Lower cost labor rates are generally off-set by lower levels of production, but in all geographic areas, labor is by far the single most expensive component in closet construction.

The Hart Concept;

High Quality Materials, Low Labor Costs

The following comparison of labor and material components is based upon a 6-foot Hart Closet and a 6-foot traditionally built closet.

The labor component of the traditional closet is calculated at I7 man hours for framing, drywall installation with process, painting and finishing (4). The cost of labor is calculated at \$26.00 per hour (5).

Traditional Closet

Traditional closet construction techniques are labor intensive and require skilled craftsmen on-site for framing, drywall, tapping, mudding twice, sanding, painting twice and finish carpentry. On average, the labor content represents about 85% of the total cost of a closet, leaving only 15% for materials.

Hart Closet:

Under the Hart Closet concept, the labor content of on-site closet construction is reduced to as little as 5% of the overall closet construction cost.

The Hart approach eliminates the need for much of the most expensive component of closet construction, on-site labor.

This approach accomplishes two things. First, the savings realized allow for the incorporation of the best materials available in the Hart Closet, assuring a noticeably superior finished product.

Secondly, a portion of the savings can be passed on to the contractor or the developer. On average, Hart Closets will be available for about 7% - 11% less than the cost of traditionally built closets.

Unit Cost Comparison:

Unit pricing for a typical single family detached house with seven closets (two 2-foot being Pantry, Broom or Linen, two 4-foot being Entry and Mudroom, two 6-foot being two Bedrooms and one 8-foot being the Master Bedroom, demonstrates the savings the Hart Closet can effect for builders.

Traditional \$3,257 Hart Closet \$2,999 Hart Savings: \$258

This comparison is based on installed, finished closets with all labor included. It reflects a savings to the contractor of approximately 8% on a single family detached housing unit.

CHARACTERISTICS OF THE MARKET

The potential market for the Hart Closet is huge. In spite of slowdowns in some regions, residential construction in the US overall is on the increase with the Pacific Coast, South Atlantic and Mid-Atlantic states leading the way.

Three key states, California, Florida and Texas continue to lead the nation in residential construction activity and, together, represent more than a third of the total US market.

Projections are that 1987 will see the construction of more than 1.6 million new homes in the United States (6):

998,000	Single Family Detached
345,000	Single Family Attached
293,000	Multi-Family Low Rise
39,000	Multi-Family High Rise
	(mobile homes are not factored in these numbers)

The three leading states will account for more than half a million of those homes, 571,000.

A feeling for the sheer size of the market can be grasped by the following. If the Hart Closet were to achieve a penetration of 6% of the Florida housing market, that market alone would generate sales in excess of \$25,000,000.

Penetration of the Texas market to the same level would result in sales of about \$14,000,000 and in California, sales of about \$40,000,000.

Fortunately, a significant portion of that huge US housing market is comprised of a smaller, more manageable number of large individual contracting companies. One company, for example, has construction operations in 14 different states, and by itself, would represent a market in the tens of millions of dollars for the Hart Closet project.

Further, as overwhelming as the US residential construction market might appear at first glance, it is largely segmented and tied-in to the country's major metropolitan areas. From a sales and marketing point of view, these individual metropolitan areas can be targeted and attacked one by one.

Finally, by targeting specific large metropolitan markets and working one-on-one with the major contractors within those markets, the high costs of traditional new product introductory advertising and promotion can be virtually eliminated.

MARKET ANALYSIS & APPROACH

A Quick but Quiet Approach to Major Metropolitan Markets

The patenting process is already underway, but it appears that with the simplicity of the Hart Closet concept, once the product becomes relatively well known, imitations will begin appearing on the market.

This anticipated competition, the size of the potential market, and its cityby-city segmentation all serve to reinforce the concept of one-on-one product presentation to major builders in selected major markets.

A first class Audio/Visual presentation and supporting collateral materials will be produced for use in person-to-person meetings with representatives of large residential construction companies in selected growth cities:

Seattle, San Francisco, San Diego, Sacramento, Los Angeles and Alanta

This approach will provide Hart Closets with a relatively quick penetration of the key US metropolitan markets and a good geographic distribution of the product in a time frame of 18 months.

Market Expansion By Region

Using the regional market designations set forth by the US Department of Commerce, Hart Closet expansion through the United States in chronological order will be as follows:

May 1987 - December 1988 <u>Pacific:</u> Washington, Oregon, California, <u>South Atlantic:</u> Florida, Georgia, West Virginia, Virginia, North Carolina, South Carolina,

January 1989 and beyond <u>Middle Atlantic:</u> New York, New Jersey, Pennsylvania <u>W/S Central:</u> Texas, Oklahoma, Arkansas, Louisiana <u>New England:</u> Maine, New Hampshire, Vermont, Rhode Island, Massachusetts, Connecticut <u>E/N Central:</u> Michigan, Wisconsin, Indiana, Illinois, Ohio <u>E/S Central:</u> Kentucky, Tennessee, Mississippi, Alabama <u>W/N Central:</u> Minnesota, Missouri, Iowa, Kansas, Nebraska, North Dakota, South Dakota <u>Mountain:</u> Montana, Wyoming, Utah, Colorado, New Mexico, Idaho, Nevada, Arizona

TWO PRIMARY TARGET REGIONS

Pacific and South Atlantic Deliver Half of US Market

It should be noted that the first two regions, targeted for expansion within the next 18 months, the Pacific and the South Atlantic, together represent nearly half of the US residential construction market.

Of the 1.6 million new homes projected for the entire US for 1987, 460,000 will be built in the South Atlantic region and 335,000 in the Pacific region, for a total of 795,000 homes - a volume of residential construction activity virtually equal to the other seven US regional markets combined.

Expansion plans for the Hart Closet provide for quick penetration of the major metropolitan markets within the Pacific and South Atlantic Regions.

A staged, market by market, approach to the key cities within the 9 states which comprise those two regions will allow for a rapid, but consistent increase in the company's production capacity. It should also result in an early positive cash flow for the company and an equal yearly pay back for its investors.

Primary Sales Benefits Identified

Sales materials in support of the Hart Closet will stress the following customer benefits :

- 7% to 11% savings on closet construction costs
- a better finished product, more attractive & functional
- enhanced sales appeal to prospective home buyers
- acceleration of the construction process overall
- quicker pay back of construction loans
- a cleaner and safer process

PROFIT POTENTIAL

In spite of the relatively modest levels of market penetration projected over the 18 month period June 1987 through December 1988, the sheer size of the markets targeted result in substantial gross sales projections.

Monthly unit sales projections are calculated as single family detached units (7 closets per unit sold) or as multi-family units (5 closets per unit sold).

To June of 1988

The first sales year, June 1987 to June 1988, will be devoted to bringing production facilities on-line and to establishing a sales presence in the five key metropolitan markets of the Pacific Coast Region: Los Angeles, San Francisco, San Diego, Sacramento and Seattle.

Combined sales levels for these five markets in June on 1988, is projected at 250 single family detached units and 290 multi-family units per month. These figures translate into gross monthly revenues of \$1,387,460.

The cost of manufacture for the Hart Closet ranges from 50% of the unit price in areas of low production to only 36% of the unit price in high production areas. However, at a minimum, gross profits should be in the neighborhood of \$1,000 per unit over manufacturing costs.

An increase in gross profits can be expected as established markets are developed and as new markets are brought on stream, because per unit costs will drop substantially as production levels rise.

To December of 1988

The primary objectives in the six months between June 1988 and December 1988 will be to accelerate the growth and development of the five key Pacific Region markets and to penetrate the South Atlantic Region with operations in Atlanta.

By December of 1988, the Hart Closet will be available in the two most active regions of residential construction in the entire US

To January of 1989 & Beyond

Expansion into the seven remaining regional markets of the US will take place after January 1989. If, in the long term, the Hart Closet were to penetrate the US national housing market to the 6% regional target level, the resultant gross revenues would approach a quarter of a billion dollars per year.

Footnotes and References

1) For Example: A recent issue of Los Angeles Magazine carried major ads for six different closet design firms in that city: The Closet Store; Colleen Baker's Closet Space Planners; Closets by Design; The Closet Factory; California Closets; and Beautiful Closets.

2) U.S. Department of Commerce/Construction Statistics Division of the Bureau of the Census (1986 Report), Addendum #1

3) Generally speaking, the "fully loaded" or total cost to a contractor for skilled workers at a construction site, are about 3% higher than the actual hourly rate paid. Such "fully loaded" costs vary greatly by area of the country. For example: Texas at \$21 per hour vs. Washington State at \$27 per hour.

- 4) Time & Materials Study on Closet Construction, Addendum #2
- 5) See footnote #3 above
- 6) US Census Bureau News 2013, Addendum #3

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U.S. Census Bureau News

Joint Release

U.S. Department of Housing and Urban Development

U.S. Department of Commerce • Washington, D.C. 20233

FOR IMMEDIATE RELEASE WEDNESDAY, FEBRUARY 20, 2013 AT 8:30 A.M. EST

CB13-28

Raemeka Mayo or Stephen Cooper Manufacturing and Construction Division (301) 763-5160

NEW RESIDENTIAL CONSTRUCTION IN JANUARY 2013

The U.S. Census Bureau and the Department of Housing and Urban Development jointly announced the following new residential construction statistics for January 2013:

BUILDING PERMITS

Privately-owned housing units authorized by building permits in January were at a seasonally adjusted annual rate of 925,000. This is 1.8 percent ($\pm 0.9\%$) above the revised December rate of 909,000 and is 35.2 percent ($\pm 1.5\%$) above the January 2012 estimate of 684,000.

Single-family authorizations in January were at a rate of 584,000; this is 1.9 percent ($\pm 0.8\%$) above the revised December figure of 573,000. Authorizations of units in buildings with five units or more were at a rate of 311,000 in January.

HOUSING STARTS

Privately-owned housing starts in January were at a seasonally adjusted annual rate of 890,000. This is 8.5 percent $(\pm 11.3\%)^*$ below the revised December estimate of 973,000, but is 23.6 percent $(\pm 13.4\%)$ above the January 2012 rate of 720,000.

Single-family housing starts in January were at a rate of 613,000; this is 0.8 percent ($\pm 11.7\%$)* above the revised December figure of 608,000. The January rate for units in buildings with five units or more was 260,000.

HOUSING COMPLETIONS

Privately-owned housing completions in January were at a seasonally adjusted annual rate of 724,000. This is 6.0 percent $(\pm 7.2\%)^*$ above the revised December estimate of 683,000 and is 33.6 percent $(\pm 17.1\%)$ above the January 2012 rate of 542,000.

Single-family housing completions in January were at a rate of 565,000; this is 7.0 percent $(\pm 8.1\%)^*$ above the revised December rate of 528,000. The January rate for units in buildings with five units or more was 152,000.

New Residential Construction data for February 2013 will be released on Tuesday, March 19, 2013, at 8:30 A.M. EDT. Our Internet site is: <u>http://www.census.gov/starts</u>

To receive the latest updates on the Nation's key economic indicators, download the America's Economy app for Apple and Android smartphones and tablets.

EXPLANATORY NOTES

In interpreting changes in the statistics in this release, note that month-to-month changes in seasonally adjusted statistics often show movements which may be irregular. It may take 3 months to establish an underlying trend for building permit authorizations, 4 months for total starts, and 6 months for total completions. The statistics in this release are estimated from sample surveys and are subject to sampling variability as well as non-sampling error including bias and variance from response, non-reporting, and under coverage. Estimated relative standard errors of the most recent data are shown in the tables. Whenever a statement such as "2.5 percent ($\pm 3.2\%$) above" appears in the text, this indicates the range (-0.7 to +5.7 percent) in which the actual percent change is likely to have occurred. All ranges given for percent changes are 90-percent confidence intervals and account only for sampling variability. If a range does not contain zero, the change is statistically significant; that is, it is uncertain whether there was an increase or decrease. The same policies apply to the confidence intervals for percent changes shown in the tables. On average, the preliminary seasonally adjusted estimates of total building permits, housing starts and housing completions are revised about three percent or less. Explanations of confidence intervals and sampling variability can be found on our web site listed above.

* 90% confidence interval includes zero. The Census Bureau does not have sufficient statistical evidence to conclude that the actual change is different from zero.

Table 1. New Privately-Owned Housing Units Authorized in Permit-Issuing Places

[Thousands of units. Detail may not add to total because of rounding]

			Uni	ted		Nort	heast	Mid	west	So	ut	W	es
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	March	769	478	25 22	204 281	82 81	46 44	119 130	79 84	361 371	260 241	145 187	93 97
	April	723	475	22	226	88	45	114	76	359	248	162	106
	May June	784 760	490 491	22 21	272 248	78 82	43 43	119 119	82 81	412 381	255 256	175 178	110 111
	Juie -	700	471	21	240	02	45	11)	01	501	250	170	
	July	811	511	29	271	91	42	114	83	404	267	202	119
	August	801	511	27	263	83	40	123	88	409	267	186	116
	September	890	550	27	313	88	44	145	94	451	287	206	125
	October	868	566	24	278	81	45	148	98	452	302	187	121
	November	900	568	28	304	79	43	158	94	466	301	197	130
	December (r)	909	573	28	308	99	48	141	102	447	298	222	125
2013:	January (p)	925	584	30	311	109	46	143	101	452	304	221	133
Avoro	ge RSE (%) ¹	1	1	8	1	3	2	2	2	1	1	1	1
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Perce	ent Change:												
	January 2013 from December 2012	1.8%	1.9%	7.1%	1.0%	10.1%	-4.2%	1.4%	-1.0%	1.1%	2.0%	-0.5%	6.4%
	90% Confidence Interval ³	± 0.9	± 0.8	± 12.7	± 2.1	± 4.1	± 6.5	± 3.4	± 4.2	± 1.2	± 1.5	± 1.3	± 1.7
	January 2013 from January 2012	35.2%	29.2%	50.0%	46.7%	39.7%	24.3%	41.6%	34.7%	19.9%	24.1%	72.7%	40.0%
	90% Confidence Interval ³	± 1.5	± 1.0	± 12.9	± 3.1	± 5.3	± 8.4	± 4.5	± 5.6	± 1.8	± 2.2	± 2.6	± 3.4
							Not sea	asonally					
2011:		624.1	418.5	21.6	184.0	68.5	39.0	102.7	70.5	320.7	227.1	132.2	81.9
2012:	(r)	815.5	514.2	24.7	276.6	84.3	43.4	130.6	87.5	415.6	270.5	185.1	112.7
RSE (%)	1	1	4	(Z)	3	2	1	1	1	(Z)	1	2
	Year to Year Percent Change ⁴	30.7%	22.9%	14.6%	50.3%	23.1%	11.3%	27.1%	24.1%	29.6%	19.1%	40.0%	37.7%
	90% Confidence Interval ³	± 1.1	± 1.0	± 6.7	± 1.5	± 4.6	± 6.4	± 1.8	± 2.2	± 0.7	± 0.9	± 2.1	± 2.7
2012.	January	46.3	29.9	1.3	15.1	4.8	2.2	5.0	3.3	28.4	18.3	8.2	6.1
2012.	February	51.9	35.1	1.5	15.2	5.5	2.2	6.5	4.6	28.9	21.1	11.1	6.8
	March	67.4	42.2	2.0	23.2	5.8	3.6	10.3	7.3	34.3	22.5	17.0	8.9
	April	62.5	43.9	1.8	16.8	7.6	1.0	10.6	7.8	30.5	22.4	13.7	9.6
	May	75.4	43.9 49.6	2.0	23.8	7.6	4.0 4.4	10.8	7.8 9.1	30.5	22.4	13.7	11.3
	June	73.8	47.6	2.0	24.3	8.8	4.1	11.4	8.2	35.4	24.0	18.2	11.2
	Inly							10.5					10.0
	July August	72.1 77.7	46.8 49.4	2.5 2.6	22.8 25.8	8.1 7.7	4.0 3.8	10.9 12.6	8.1 9.0	35.9 39.1	23.8 25.4	17.2 18.4	10.9 11.1
	September	71.4	43.0	2.0	26.3	7.3	3.7	12.0	8.1	35.2	21.5	16.0	9.7
					22.9	7.6	4.2	15.6	9.9	36.5	24.7	15.6	10.3
	October November	75.3	49.2	2.3	23.8			125	6.0	22.0	21.2		00
	October November December (r)	75.3 66.5 65.1	49.2 40.1 36.1	2.3 2.2 2.0	23.8 24.2 27.0	6.1 7.8	3.3 3.1	12.5 8.7	6.9 5.3	33.8 32.7	21.2 19.6	14.1 16.0	8.8 8.0
2012	November December (r)	66.5 65.1	40.1 36.1	2.2 2.0	24.2 27.0	6.1 7.8	3.3 3.1	8.7	5.3	32.7	19.6	14.1 16.0	8.0
	November	66.5	40.1	2.2	24.2	6.1	3.3					14.1	

(p) Preliminary. (r) Revised. RSE Relative standard error. S Does not meet publication standards because tests for identifiable and stable seasonality do not meet reliability standards. X Not applicable. Z Relative standard error is less than 0.5 percent.

¹Average RSE for the latest 6-month period. ²Reflects revisions not distributed to months. ³ See the Explanatory Notes in the accompanying text for an explanation of 90% confidence intervals.

⁴ Computed using unrounded data.

Table 2. New Privately-Owned Housing Units Authorized, but Not Started, at End of Period

[Thousands of units. Detail may not add to total because of rounding]

			United	States		North	neast	Mid	west	So	uth	W	est
	Period		In st	ructures wit	th								
	i chou			2 to 4	5 units								
		Total	1 unit	units	or more	Total	1 unit	Total	1 unit	Total	1 unit	Total	1 unit
							Not seasona	ally adjusted	1				
2012.	January	75.0	39.9	1.6	33.5	8.1	5.0	5.6	3.7	41.4	21.1	20.0	10.1
2012.	February	73.0	44.2	1.0	32.6	8.1 9.8	5.1	5.0 6.7	4.5	41.4	23.5	20.0	10.1
	March	87.6	45.2	2.0	40.4	8.4	5.2	8.4	5.2	44.4	23.6	26.4	11.3
	April	80.6	44.2	2.0	34.5	8.8	5.1	7.2	5.3	39.9	22.8	24.8	11.1
	May	85.8	45.1	1.6	39.2	8.0	4.9	8.5	5.7	43.6	23.5	25.7	11.0
	June	84.7	43.5	1.5	39.8	8.5	5.6	9.3	4.9	43.3	22.2	23.6	10.7
	July	87.5	42.1	1.5	44.0	8.9	5.2	8.7	4.7	48.2	22.6	21.7	9.6
	August September	94.5 93.3	46.4 42.4	1.8 2.2	46.4 48.7	9.1 8.4	5.4 4.9	8.7 8.3	5.2 5.3	53.2 53.0	24.8 21.6	23.6 23.5	10.9 10.6
	September	95.5	42.4	2.2	40.7	6.4	4.9	8.5	5.5	55.0	21.0	25.5	10.0
	October	89.9	42.6	2.0	45.3	8.0	5.3	8.5	5.0	52.3	22.7	21.0	9.7
	November (r)	90.1	43.9	2.6	43.6	8.4	5.0	8.6	4.5	51.2	24.8	21.9	9.5
	December (r)	92.7	43.5	2.5	46.6	8.1	4.5	6.4	4.6	54.2	25.1	24.0	9.3
2013:	January (p)	96.3	44.9	2.8	48.6	9.4	4.5	8.1	4.9	54.5	25.7	24.4	9.9
Avera	ge RSE $(\%)^1$	6	6	21	9	17	21	12	11	7	9	14	17
Perce	nt Change: ²												
	January 2013 from December 2012	3.9%	3.2%	10.6%	4.3%	15.6%	-1.1%	25.6%	5.8%	0.7%	2.6%	1.6%	5.9%
	90% Confidence Interval ³	± 3.7	± 4.3	± 25.8	± 5.9	± 16.3	± 14.5	± 15.1	± 17.5	± 4.4	± 5.0	± 7.0	± 11.0
	January 2013 from January 2012	28.4%	12.8%	73.6%	44.8%	16.3%	-9.4%	44.8%	33.3%	31.7%	21.8%	22.0%	-2.6%
	90% Confidence Interval ³	± 10.6	± 10.8	± 58.3	± 20.5	± 23.0	± 18.0	± 36.9	± 30.9	± 17.5	± 17.0	± 19.3	± 15.5

(p) Preliminary. (r) Revised. RSE Relative standard error. S Does not meet publication standards because tests for identifiable and stable seasonality do not meet reliability standards.

¹Average RSE for the latest 6-month period. ² Computed using unrounded data.

³ See the Explanatory Notes in the accompanying text for an explanation of 90% confidence intervals.

Note: These data represent the number of housing units authorized in all months up to and including the last day of the reporting period and not started as of that date without regard to the months of original permit issuance. Cancelled, abandoned, expired, and revoked permits are excluded.

Table 3. New Privately-Owned Housing Units Started

[Thousands of units. Detail may not add to total because of rounding]

		United In structures with			Nort	heast	Mid	west	So	uth	W	est	
	Period		In s	tructures w	/ith								
		Total	1 unit	2 to 4	5 units or more	Total	1 unit	Total	1 unit	Total	1 unit	Total	1 unit
							Seasonal	ly adjusted					
2012:	January	720	511	(S)	193	74	44	106	82	403	290	137	95
	February	718	470	(S)	240	66	50	99	87	419	253	134	80
	March	706	481	(S)	215	87	45	116	88	354	249	149	99
	April	747	504	(S)	234	80	48	125	91	395	265	147	100
	May	706	513	(S)	178	76	43	108	86	365	276	157	108
	June	754	531	(S)	215	78	48	98	87	366	276	212	120
	July	728	506	(S)	211	86	41	111	77	348	278	183	110
	August	750	538	(S)	205	74	47	130	89	376	293	170	109
	September	843	590	(S)	245	77	48	147	107	418	306	201	129
	October	889	589	(S)	281	78	41	156	109	438	289	217	150
	November (r) December (r)	841 973	570 608	(S) (S)	261 352	68 116	48 55	154 190	96 103	451 464	297 317	168 203	129 133
	Determoer (1)	973	008	(3)	552	110	55	190	105	404	517	205	155
2013:	January (p)	890	613	(S)	260	75	50	95	93	483	331	237	139
Averaş	ge RSE (%) ¹	5	4	(X)	12	16	14	13	13	7	5	8	9
Perce	nt Change:												
	January 2013 from December 2012	-8.5%	0.8%	(S)	-26.1%	-35.3%	-9.1%	-50.0%	-9.7%	4.1%	4.4%	16.7%	4.5%
	90% Confidence Interval ²	± 11.3	± 11.7	(X)	± 21.2	± 28.9	± 43.6	± 11.8	± 29.8	± 17.3	± 13.4	± 21.4	± 17.2
	January 2013 from January 2012	23.6%	20.0%	(S)	34.7%	1.4%	13.6%	-10.4%	13.4%	19.9%	14.1%	73.0%	46.3%
	90% Confidence Interval ²	± 13.4	± 11.2	(X)	± 42.4	± 50.3	± 44.1	± 20.2	± 22.1	± 15.8	± 13.5	± 40.9	± 24.2
]	Not season	ally adjuste	d				
2011: 2012:	(r)	608.8 779.9	430.6 534.6	10.9 11.1	167.3 234.2	67.7 79.7	41.2 46.5	100.9 128.1	74.3 92.0	307.8 397.7	229.3 282.1	132.5 174.4	85.7 113.9
RSE (%)	1	1	14	3	3	5	2	4	2	2	2	2
	Year to Year Percent Change ³	28.1%	24.1%	1.7%	40.0%	17.7%	12.7%	27.0%	23.8%	29.2%	23.0%	31.7%	32.9%
	90% Confidence Interval ²	± 2.6	± 2.6	± 23.6	± 8.3	± 7.3	± 9.7	± 5.1	± 4.8	± 4.7	± 3.9	± 6.3	± 4.8
	·												
2012:	January	47.2	33.1	1.1	13.0	4.6	2.6	5.3	3.7	28.4	20.7	9.0	6.1
	February	49.7	32.2	0.6	16.9	3.8	2.7	5.0	4.1	31.1	19.5	9.8	5.9
	March	58.0	40.2	0.8	17.1	7.0	3.7	8.4	6.1	30.2	21.8	12.4	8.5
	April	66.8	46.6	0.7	19.5	7.1	4.4	11.3	8.5	35.0	24.2	13.4	9.5
	May	67.8	50.1	1.3	16.3	7.4	4.4	11.4	9.4	33.4	25.3	15.5	11.0
	June	74.7	54.4	0.7	19.6	7.7	5.0	10.5	9.5	35.9	27.7	20.5	12.2
	July	69.2	49.4	1.0	18.7	8.1	4.1	11.3	8.3	32.0	25.8	17.7	11.2
	August September	69.0 75.8	49.3	0.7	19.0	6.9 6.9	4.4	12.9	9.1 9.8	33.3 37.5	25.6	15.8	10.2
	September	/5.8	51.4	0.8	23.6	0.9	4.1	13.6	9.8	31.3	26.7	17.8	10.8
	October	77.0	50.3	1.7	25.1	7.1	3.8	15.0	10.8	37.3	24.0	17.7	11.7
	November (r) December (r)	62.2 62.5	40.1 37.5	0.8 0.9	21.3 24.2	5.1 8.0	3.5 3.8	12.1 11.2	7.4 5.3	33.0 30.4	20.5 20.3	11.9 12.9	8.7 8.0
2013:	January (p)	58.5	39.6	1.1	17.7	4.7	3.0	4.2	4.1	34.0	23.6	15.6	8.9
Averag	ge RSE (%) ¹	5	4	33	12	16	14	13	13	7	5	8	9

(p) Preliminary. (r) Revised. RSE Relative standard error. S Does not meet publication standards because tests for identifiable and stable seasonality do not meet reliability standards. X Not applicable.

¹Average RSE for the latest 6-month period.

³ Computed using unrounded data.

² See the Explanatory Notes in the accompanying text for an explanation of 90% confidence intervals.

Table 4. New Privately-Owned Housing Units Under Construction at End of Period

[Thousands of units. Detail may not add to total because of rounding]

			United	States		Nort	heast	Mid	west	So	uth	We	est
	Period		In s	tructures wi	th								
	renou			2 to 4	5 units								
		Total	1 unit	units	or more	Total	1 unit	Total	1 unit	Total	1 unit	Total	1 unit
							Seasonal	ly adjusted					
2012:	January	443	241	(S)	191	90	36	69	46	182	111	102	48
	February	450	241	(S)	191	89	37	70	40	182	111	102	48
	March	459	245	(S)	204	90	37	69	47	191	111	109	50
	April	464	247	(S)	207	89	37	70	47	197	113	108	50
	May June	474	252	(S)	212	89 89	36	71 70	48 48	202	115	112	53 57
	June	486	258	(S)	219	89	35	70	48	207	118	120	57
	July	491	263	(S)	219	88	35	69	48	211	122	123	58
	August	497	267	(S)	222	91	36	69	49	216	124	121	58
	September	512	272	(S)	232	91	36	73	50	222	126	126	60
	October	520	275	(S)	236	90	34	76	51	225	128	129	62
	November (r)	534	280	(S)	230	90	34	81	53	223	120	129	63
	December (r)	549	282	(S)	258	92	34	86	52	239	132	132	64
2013:	January (p)	557	284	(S)	264	92	34	86	52	244	133	135	65
Avera	ge RSE (%) ¹	2	3	(X)	3	5	6	4	7	3	4	3	5
Perce	ent Change:												
	January 2013 from December 2012	1.5%	0.7%	(S)	2.3%	0.0%	0.0%	0.0%	0.0%	2.1%	0.8%	2.3%	1.6%
	90% Confidence Interval ²	± 1.0	± 1.3	(X)	± 1.4	± 2.3	± 4.2	± 1.5	± 2.5	± 1.5	± 1.8	± 2.0	± 1.9
	January 2013 from January 2012	25.7%	17.8%	(S)	38.2%	2.2%	-5.6%	24.6%	13.0%	34.1%	19.8%	32.4%	35.4%
	90% Confidence Interval ²	± 3.9	± 4.4	(X)	± 7.4	± 6.5	± 9.2	± 7.9	± 7.3	± 8.4	± 5.8	± 11.8	± 14.1
							Not season	ally adjusted	đ				
2012.	January	426.8	227.7	10.4	188.7	87.7	34.6	66.1	43.4	174.0	104.2	99.0	45.4
2012.	February	426.8	227.7	10.4	194.4	86.1	34.0	65.3	43.4	174.0	104.2	101.0	45.4
	March	449.3	236.5	10.2	202.6	88.7	35.5	64.8	43.3	189.4	109.6	106.4	48.0
	April	462.1	245.0	10.4	206.6	88.7	36.6	68.0	45.1	197.6	113.7	107.9	49.6
	May June	478.1 496.2	255.1 265.7	10.2 9.1	212.8 221.5	89.6 90.1	36.4 35.3	70.4 72.2	47.1 49.9	205.0 212.2	117.9 122.5	113.1 121.8	53.6 58.0
	June	496.2	203.7	9.1	221.3	90.1	55.5	12.2	49.9	212.2	122.3	121.8	58.0
	July	503.7	275.5	8.6	219.6	89.4	36.0	71.4	50.5	216.4	127.3	126.5	61.7
	August	508.6	279.8	7.8	221.0	92.0	37.3	72.1	51.9	219.9	128.7	124.5	61.9
	September	523.5	283.8	8.1	231.5	91.6	36.6	75.6	52.7	227.6	131.7	128.8	62.9
	October	528.8	282.7	9.1	237.0	91.2	34.8	79.0	54.2	227.3	129.9	131.3	63.8
	November (r)	535.2	278.6	9.0	247.7	90.4	34.2	82.3	54.1	232.8	128.3	129.8	62.1
	December (r)	530.0	265.7	8.8	255.5	90.7	33.4	83.5	50.0	228.6	122.2	127.1	60.0
2013.	January (p)	538.4	267.5	9.4	261.5	90.4	32.7	82.7	49.1	235.2	125.0	130.1	60.7
Avera	ge RSE (%) ¹	2	3	13	3	5	6	4	7	3	4	3	5

(p) Preliminary. (r) Revised. RSE Relative standard error. S Does not meet publication standards because tests for identifiable and stable seasonality do not meet reliability standards. X Not applicable.

¹Average RSE for the latest 6-month period.

² See the Explanatory Notes in the accompanying text for an explanation of 90% confidence intervals.

Table 5. New Privately-Owned Housing Units Completed

[Thousands of units. Detail may not add to total because of rounding]

			United	States		North	neast	Mid	west	Sou	ıth	We	est
	Period		In st	ructures wi	ith								
	renou			2 to 4	5 units								I
		Total	1 unit	units	or more	Total	1 unit	Total	1 unit	Total	1 unit	Total	1 unit
						Sea	sonally adju	isted annua	l rate				
2012:	January	542	394	(S)	140	89	37	87	65	275	220	91	72
	February	572	432	(S)	136	79	40	97	79	283	229	113	84
	March	587	440	(S)	136	71	44	121	79	284	227	111	90
	April	663	490		170	80	44	106	90	325	246	152	110
	May	605	490 469	(S) (S)	170	80 80	44 49	108	90 88	299	240 247	132	85
	June	623	475	(S)	131	72	57	107	75	319	253	125	90
													l.
	July	673	466	(S)	198	90	42	135	87	312	243	136	94
	August September	682 659	492 514	(S) (S)	181 140	63 76	41 50	119 110	80 94	331 331	262 264	169 142	109 106
		057	514	(5)	140	70	50	110	74	551	204	142	100
	October	739	531	(S)	203	64	55	118	93	408	267	149	116
	November (r)	670	515	(S)	146	71	47	94	81	344	263	161	124
	December (r)	683	528	(S)	147	57	47	109	102	355	270	162	109
2013:	January (p)	724	565	(S)	152	75	59	87	81	377	299	185	126
	$e RSE (\%)^{1}$	6	5	(X)	17	17	19	11	12	9	7	10	10
		-	-	()									
Perce	nt Change:												
	January 2013 from December 2012	6.0%	7.0%	(S)	3.4%	31.6%	25.5%	-20.2%	-20.6%	6.2%	10.7%	14.2%	15.6%
	90% Confidence Interval ²	± 7.2	± 8.1	(X)	± 21.8	± 36.4	± 40.7	± 11.2	± 12.3	± 10.0	± 11.2	± 14.8	± 13.2
	January 2013 from January 2012	33.6%	43.4%	(S)	8.6%	-15.7%	59.5%	0.0%	24.6%	37.1%	35.9%	103.3%	75.0%
	90% Confidence Interval ²	± 17.1	± 20.8	(X)	± 31.4	± 31.1	± 68.8	± 21.4	± 34.8	± 30.6	± 31.1	± 41.7	± 37.2
							Not seasona	ally adjusted	1				
2011:		584.9	446.6	8.4	129.9	72.5	44.0	103.0	75.9	295.5	235.6	113.9	91.2
2012:	(r)	650.0	483.3	8.7	157.9	74.7	46.8	110.7	85.4	325.0	250.6	139.5	100.5
RSE (%)	2	2	18	4	6	6	3	5	2	2	4	4
	Year to Year Percent Change ³	11.1%	8.2%	3.4%	21.6%	3.0%	6.4%	7.5%	12.5%	10.0%	6.4%	22.5%	10.3%
	90% Confidence Interval ²	± 4.6	± 3.5	± 28.6	± 17.1	± 14.4	± 12.4	± 6.2	± 6.8	± 6.7	± 4.9	± 8.2	± 6.4
													l
2012.	January	36.4	26.0	0.6	9.8	5.8	2.2	5.8	4.3	18.8	14.9	6.0	4.7
2012.	February	39.0	20.0	0.3	9.3	5.3	2.2	6.4	5.2	19.9	14.9	7.4	5.4
	March	44.4	33.6	0.8	9.9	4.8	2.9	8.4	5.3	22.1	17.9	9.1	7.6
	April	52.2	27.6	0.2	14.5	<i>(</i> 1	2.0	0.2	C 0	25.1	10.4	11.0	
	May	52.3 50.0	37.6 39.3	0.3 1.2	14.5 9.5	6.1 6.8	3.0 4.4	8.3 8.5	6.9 7.4	26.1 24.5	19.4 20.4	11.9 10.1	8.3 7.1
	June	55.1	42.4	1.4	11.2	7.2	5.9	9.0	6.3	27.9	22.3	10.9	7.9
	July	58.2	38.3	0.9	19.0	8.0	3.4	11.8	7.2	26.7	20.1	11.7	7.7
	August	58.2 64.8	43.3	1.0	20.5	8.0 6.1	3.4 3.6	11.8	7.2	26.7 30.9	20.1	11.7	9.7
	September	58.7	46.6	0.4	11.7	6.6	4.5	10.3	9.0	28.7	23.1	13.0	10.0
	Ostohan												10 -
	October November (r)	67.7 57.8	50.1 45.6	0.4 0.7	17.2 11.5	6.3 6.2	5.5 4.3	11.3 8.9	9.2 7.8	36.6 28.7	24.7 22.4	13.5 14.0	10.7 11.1
	December (r)	65.6	43.0 51.0	0.7	13.8	5.4	4.5	10.6	10.0	34.1	22.4	14.0	10.4

2013: January (p)	47.6	37.8	0.4	9.4	4.8	3.8	5.6	5.2	25.2	20.4	12.1	8.5
Average RSE (%) ¹	6	5	44	17	17	19	11	12	9	7	10	10

(p) Prelminary. (r) Revised. RSE Relative standard error. S Does not meet publication standards because tests for identifiable and stable seasonality do not meet reliability standards. X Not applicable.

 2 See the Explanatory Notes in the accompanying text for an explanation of 90% confidence intervals.

¹Average RSE for the latest 6-month period. ³ Computed using unrounded data.

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