Weldtex:

The Plywood Panel that Grows Old Gracefully

By Mary Ottoson, M.S. Historic Preservation
School of the Art Institute of Chicago
April 2009

Acknowledgements

I would like to thank the staff at the Flaxman Library of the School of the Art Institute of Chicago for all of their help with acquiring material that was located in various institutions and museums across the country. In particular, thanks to Holly Dankert and Alexis Petroff for helping to access a huge amount of material that was outside of the Chicago vicinity. Without their diligence in handling my requests from other institutions, this research would not have been possible. Also, a big thank you to my three professors for the Lustron to Neon: Recent Past course. Anne Sullivan, Carol Dyson and Anthony Rubano were all excellent resources and provided the guidance and advice that was needed to make this study possible. Last but not least, I would also like to acknowledge Elizabeth Bromen, Reference Librarian at the Cooper-Hewitt, National Design Museum Library (Smithsonian) in New York. Her vast knowledge of their archival holdings of the Donald Deskey collection and her willingness to pay personal attention to this project is appreciated more than she can ever know. Without these professionals, most of the material referenced for this study would not have been available. I will be forever indebted to your compassion for graduate students and their work. Thank you.

Weldtex, a popular form of striated plywood paneling commercially introduced in 1940, was developed by renowned American designer Donald Deskey. Weldtex was initially marketed for post-war prefabricated housing. However, by the early 1950s it had become popular among American homeowners who were sought a modern, affordable material to decorate previously unusable living space (primarily basements, attics and "rumpus rooms"). Though Donald Deskey has been thoroughly researched, his "Weldtex" has not. The material swept the nation as an economical alternative to expensive, traditional hardwood-veneer paneling and was advertised as a modern "do-it-yourself" product. Because of the wide popularity of Weldtex among post-war homeowners, it may be commonly found in homes across the country. For nearly 20 years, Weldtex was one of the choice materials used in residential renovations. This study will consist of three main components: a description of the history and development of Weldtex; a discussion of its popularity and usage through the documentation of advertisements and marketing campaigns; and an explanation of why the popularity of Weldtex declined.[1]

Donald Deskey (1894-1989), was an American designer who flourished during the 1920s and 1930s. His most famous project has proven to be Radio City Music Hall in Manhattan. Deskey was also the creator of various icons of graphic designs for products such as Crest toothpaste, Aqua Velva (after-shave), Cheer laundry detergent and Prell Shampoo. His obituary memorialized him by stating that he was "one of the last remaining leaders of a pioneering generation of industrial designers..."[2] Deskey spent his early years in Minnesota, but left for California after his high school graduation. Though not formally educated as an architect or designer, Deskey did study architecture at the University of California at Berkeley in 1915.[3] His early career included various jobs such as an engineer of public roads, a draftsman for Standard Oil Company, and a soda jerk. A 1933 *New Yorker* article stated that until Deskey was nearly 30, his "connection with art was either that of an amateur or of an advertising man, and the future he looked forward to was that of a sound and energetic American man of business."[4]

[1] For the purpose of this essay the general topic of plywood manufacture and availability in the mid 20th century will not be discussed.
[2] Suzanne Slesin, "Donald Deskey, Innovative Designer, Dies at 94," *New York Times*, April 30 1989.
[3] As one 1939 article (including Deskey as a well-known Industrial Designer) pointed out, academic programs specializing in Industrial Design did not exist during Deskey's younger days. (Daniel Schwarz, "Art for Art's Sake," *New York Times*, April 2 1939.)
[4] Slesin, "Donald Deskey, Innovative Designer, Dies at 94."

Deskey's designs skyrocketed in popularity when he was awarded contracts for Manhattan department store displays with Frankin Simon and Saks Fifth Avenue in the 1920s and 1930s.[5]

Deskey earned a reputation of being a designer who experimented with numerous modern materials throughout his design career. In the late 1920s, his designs incorporated materials such as cork, asbestos and plastic laminates. By the early 1930s, he was considered a leader in the movement, marrying modern materials with architecture. Deskey's interest in prefabricated homes began prior to World War II and was influenced by the onset of the Depression. In 1933, the Century of Progress Exhibition (one of the most influential world's fairs) took place in Chicago. Regarding architecture and design, the Century of Progress Exhibition emphasized modernity and technological advancements. According to David A. Hanks, a leading expert on American decorative design, Deskey collaborated with architect Howard Fisher to produce a design for a prefabricated home.[6] Hanks asserted that by World War II, "most promoters of prefabrication believed that only wood – specifically, plywood bonded with waterproof synthetic resin – provided an economical material for solving the nation's acute housing shortage."[7]

As World War II drew to a close, Deskey became increasingly devoted to producing an appropriate prefabricated solution to the looming housing shortage. However, since the Chicago exhibition, prefabricated housing had generally been associated with sleek and "Moderne" materials. Deskey believed that at the war's end, the American public would want to return to a traditional, rustic look for prefabricated houses, rather than the modern mechanical feel that designers had been emphasizing for the previous ten years. According to Hanks, Deskey felt that "anyone building a permanent house would want to have materials reminiscent of earlier American structures, such as clapboard or shingles – not metal."[8] He realized that a preliminary component of prefabricated housing was cheap material that could be easily assembled. Deskey chose Douglas Fir since the most prevalent and therefore cheapest wood used in plywood manufacture.

Though plywood had been used since Egyptian times (as plywood manufacturers often reported), the "veneered" versions came to have negative connotations. Veneered products (particularly plywood), were considered to be fake, mimicking the "real thing" with a cheap foundation and topped with a thin

[5] For an interesting and comprehensive study of Deskey's life, see David A. and Jennifer Toher Hanks, *Donald Deskey: Decorative Designs and Interiors* (New York: E.P. Dutton, 1987).
[6] Fisher's homes from the exhibition went on to become part of the General Houses, Inc. For more information on the exhibition homes, see Colin Davies, *The Prefabricated Home* (London: Reaktion Books, 2005).
[7] Hanks, *Donald Deskey: Decorative Designs and Interiors*. 125.
[8] Ibid. 7.

layer of expensive hardwoods. Manufacture of plywood during the 1940s included six main steps: the cutting of veneers, applying adhesives, collating or separating veneers, applying pressure and heat, drying and finishing.[9] Most softwoods (such as Douglas Fir) were usually rotary cut, - meaning a log was placed on a lathe and the veneer was peeled off in a continuous strip along the log's longitudinal axis.[10] Also, the majority of plywood that was used in residential construction (prefabricated or not) was of multi-ply construction (when an odd number of plies or layers of veneer are glued or welded together so that the grain of any one ply at right angles to that other layers.[11]

Generally, plywood's major problem was that the face ply had a tendency to swell and shrink under varying moisture conditions, which after a period of time would result in "unsightly cracks between abutting panels."[12] This issue hindered the material's popularity and dependability. It was not until 1934, when Dr. James V. Nevin invented the phenol-formaldehyde resin as an adhesive, that plywood became a stable and reliable building material, particularly for exterior uses.[13] Prior to 1934, the primary glues used were animal-based, casein or soya-bean. Nevin's phenol-formaldehyde resin revolutionized and revitalized the industry. His achievement was recognized early on as having "paved the way for prefabricated housing and opened up hundreds of new markets for plywood."[14] Also contributing to the growing popularity of plywood was the use of hot-presses during manufacture. Resin adhesives (such as Nevin's), required greater accuracy in regards to temperature, pressure and level or even thickness. In contrast to the economical and popular cold-presses, only hot-presses met the demands of resin adhesives. Up until 1936, the Douglas Fir industry was primarily using cold-press operators, but by 1940 there were eleven hot presses in operation.[15] With improved adhesives and presses, by 1940,

[9] Louis H. Meyer, *Plywood; What It Is, What It Does* (New York: McGraw-Hill Book Company, 1947). 5.
[10] Nearly 95% of veneer was rotary cut by 1943.Andrew Dick and Thomas Gray Linn Wood, *Plywoods: Their Development, Manufacture and Application* (Brooklyn, New York: Chemical Publishing Company, Inc., 1943). 41.
[11] Ibid. 9.
[12] http://cases.justia.com/us-court-of-appeals-F2/258/124/412371/
Page 2 of 14
[13] In 1947, Louis H. Meyer, a former employee of United States Plywood corporation and author of *Plywood: What It Is and What It Does,* stated that "Phenol-formaldehyde resin provides an entirely new type of adhesive. The plies of plywood made with it are permanently welded together. It may be subjected to an unlimited series of wet-dry cycles, to boiling for an indefinite period, and to heat sufficient to char the veneers without measurably affecting the strength of its glue lines. The resin is proof against fungus attack or other bacterial deterioration and against mild acids and alkalies." This statement, nearly fifteen years after the invention of Nevin's resin adhesive, is a testament to the ingeniousness of Deskey's design in 1939.
[14] Robert M. Cour, *The Plywood Age: A History of the Fir Plywood Industry's First Fifty Years*, ed. Douglas Fir Plywood Association (Portland, Oregon: Binfords and Mort, 1955). 92.
[15] Wood, *Plywoods: Their Development, Manufacture and Application*. 181.

plywood was significantly more reliable, fungus-proof and water-proof. Contemporary reports show that American Fir plywood production increased from 235 million in 1931 to 1.6 billion by 1941.[16]

The publication of plywood trade manuals and literature (including commercial publications and pamphlets) skyrocketed from 1934 thru the early 1940s.[17] Architects and builders across the country sought new applications for this new, flexible and durable generation of plywood . An early manual of plywood application was published in 1943 by Andrew D. Wood and Thomas G. Linn and incorporated a preface by one of the leaders of the industry, Lawrence Ottinger, president of United States Plywood Corporation (USP).[18] The comprehensive text, *Plywoods: Their Development, Manufacture and Application,* stressed plywood's importance in new building construction and architectural industries. Wood and Linn stated that "modern designers [had] re-discovered the intrinsic beauties in the grain patterns of many woods" and that the large surfaces of plywood had recently enabled designers "to do away with much applied woodwork in the form of stiles, rails and moldings which had been such essential features in earlier types of paneling." The modern designer "went a step further when he realized that he had to hand a medium which, in addition to being decorative, was a constructional material of great strength and utility."[19]

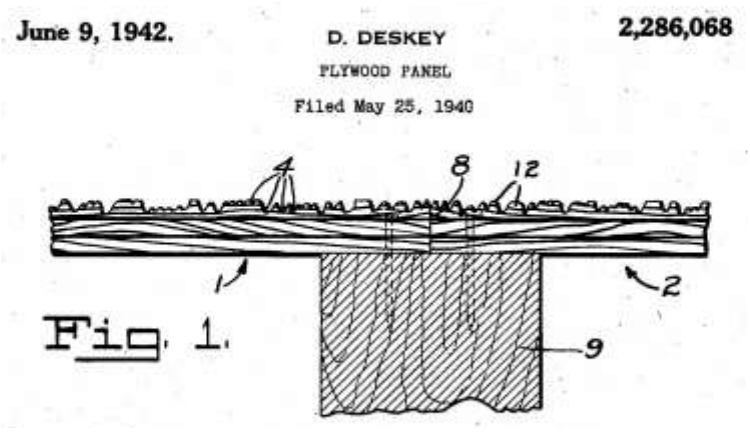

Figure 1.
Source: Deskey, Donald. "Plywood Panel (2,286,068)." edited by United States Patent & Trademark Office. Alexandria, Virginia, 1940.

In 1939, Deskey brought some samples panels of Douglas fir plywood into his Rockefeller Center office and began to experiment. According to a 1945 excerpt from the profile of Lawrence Ottinger, Deskey felt that "since scratches were the bane of modernism, he got the idea of scratching all surfaces

[16] Ibid. 6. These figures are representative of "3/8 inch, 3-ply, rough thickness." Because Weldtex was intended to be used in both interior and exterior applications (requiring a phenol-formaldehyde resin adhesive), it is most likely that the Douglas Fir plywood used for Weldtex was manufactured using the hot-press method.

[17] Most texts outlined the history of plywood (especially in the Pacific Northwest) and then explained the manufacturing process. Three of the most popular and widely available plywood texts introduced during the early part of World War II were: *Plywoods, Their Development, Manufacture and Application* by Andrew D. Wood and Thomas Gray Linn (1943); *Plywood: What It Is and What It Does* by Louis H. Meyer (who was a former Advertising Manager and Field Research Director of United States Plywood corporation, 1947); and *Modern Plywood* by Thomas D. Perry (1942).

[18] Ottinger went on to become one of Weldtex's chief supporters.

[19] Wood, *Plywoods: Their Development, Manufacture and Application*. 250.

so thoroughly that generations of careless housemaids and cocktail parties could do nothing but improve them."[20] Eventually, Deskey's solution to the plywood problem was to gouge grooves into the face-ply. The result was a striated panel with multiple parallel grooves cut to a substantial depth but no deeper than the face ply itself, and running the length of the face ply. As the patent illustration *(figure 1)* shows, striations were only on the face-ply, not on both sides the panel. Weldtex in this sense was special, as it was one of the earliest applications of Douglas Fir plywood being used as the face or veneer material, for decorative purposes. Whereas previously fir had been used for the core or other cross plies, Douglas fir was now on display as the face ply, with the striations being the focal point.

Two different accounts exist of how USP became involved with Weldtex. The first, as according to Hanks, states that Deskey created a small sample for the W.J. Sloane furniture company that attracted the attention of Lawrence Ottinger, President of U.S. Plywood Corporation (USP). In the second account, according to Ottinger's 1945 excerpt, Deskey called in Ottinger to see the sample first-hand. "The plywood man studied it a while without committing himself. Many of the USP executives from all parts of the country happened to be in New York for their annual conference. Ottinger took them to see the striated Douglas fir… 'It's a dust-catcher,' said one executive. 'It's a hybrid,' said another. 'They're all against it, Deskey,' said Ottinger. 'We'll go ahead with it.'"[21] While this particular excerpt attempts to celebrate the foresight of Ottinger in 1939, it remains unclear exactly how the agreement was made between Deskey and USP and what the terms of the contract were. It is not surprising that USP jumped at the opportunity to market Weldtex as part of their Weldwood product line, for the company was making great efforts to market Weldwood as the newest and most modern option of plywood available. An early USP catalog stated that 'The Weldwood process [had so] extended the logical use of Plywood that architects and engineers must view it in light of a new material."[22] Also, according to the catalog, one of Weldwood's chief uses was prefabricated housing, thanks resin glues. Thus, it appears as though the marriage of Weldtex and Weldwood was pre-destined. Whatever the sequence of events may have been between Ottinger & Deskey, the team of USP and Deskey successfully filed for a patent for Weldtex on May 25, 1940.[23] The name "Weldtex" was chosen as it directly refers to the resin adhesive

[20] "Excerpt from Profile of Lawrence Ottinger, President United States Plywood Corporation," in *Donald Deskey Archives* (New York: Cooper-Hewitt National Design Museum, 1945).
[21] Ibid.
[22] United States Plywood Corporation, *The Plywood Catalog*, (New York Public Library Archives) (United States Plywood Corporation, c. 1936). 23.
[23] **For an illustration of Deskey's patent illustration, see figure 1.** The Weldtex patent was officially granted on June 9, 1942. Donald Deskey, "Plywood Panel (2,286,068)," ed. United States Patent & Trademark Office (Alexandria, Virginia1940).

used that allowed for the plies to be *welded* together as well as to the *texture* created by Deskey's gouged striations.[24]

Weldtex offered three main physical advantages. The first advantage was that the "expansion and contraction" were "minimized" because the striations relieved surface tension.[25] Second, was the inherent advantage that the resin adhesive and hot-press offered, which rendered the wood "impervious to rot...alcohol, oil, mild acids and alkalis" as well as to"bacterial deterioration."[26] A 1941 USP catalog prominently listed the advantages of Weldtex, as illustrated by *figure 2*. Third, the surface striations masked imperfections such as grain irregularities, warping and checking, joint lines and attaching materials such as nails. Though traditionally cut Douglas Fir was frequently used as varnished trim, Douglas Fir veneer was not considered handsome. In fact, its grain was typically considered rather distasteful. The striations that Weldtex provided allowed for a cheap face ply with highly decorative and attractive results. The vertical striations created a textured panel which played with light and shadow. Also, by rotating or installing the panels in alternating directions or diagonals, interesting and unique patterns were created.

Though the experimentation with plywood was not novel, Deskey's desire was unique in that he intended the application of Weldtex to be used in prefabricated housing as a decorative and utilitarian material, rather than a strictly structural element. Without Nevin's resin, the birth of Weldtex would have proven impossible, but Deskey realized that the resin had opened a new market for designers. Deskey took a modern material in a traditional direction. This was unlike his previous, streamlined and Moderne work. During this period (as Hanks pointed out), "Deskey was in revolt against Deskey." He had been convinced that "modernism was on the wrong track" and he felt that some of his own designs that incorporated modern materials did not "grow old gracefully," but rather became "passé."[27]

[24] The idea for naming the product "Weldtex" most likely was a product of USP's marketing department, as the motto for their Weldwood line (which Weldtex later became a part of) was, "Plastics and Wood Welded for Good." The USP Weldwood logo and tagline may be seen on any 1940s or 1950s Weldwood-specific advertisement. A USP catalog from circa 1936 stated that "Plywood made with phenolic resin glue is practically welded. Hence our product so manufactured is marketed under the trade-marked name "Weldwood." United States Plywood Corporation, *The Plywood Catalog*. 11.

[25] ———, *Weldwood Sales Manual* (New York: United States Plywood Corporation, 1952). 19-F, B1. USP manuals and catalogs purported this as one of the primary advantages of Weldtex, and this reasoning was supported in the 1958 court case, but USP laboratory studies from 1939/1940 have yet to be discovered providing scientific hard evidence. Though not specifically mentioning Weldtex, the Douglas Fir Plywood Association did produce a technical manual for engineers and architects, originally in 1942 and then reprinted again in 1948. (Douglas Fir Plywood Association, *Technical Data on Douglas Fir Plywood for Engineers & Architects* (Tacoma, Washington: Douglas Fir Plywood Association, 1948).

[26] United States Plywood Corporation, *The Plywood Catalog*. 11.

[27] "Excerpt from Profile of Lawrence Ottinger, President United States Plywood Corporation."

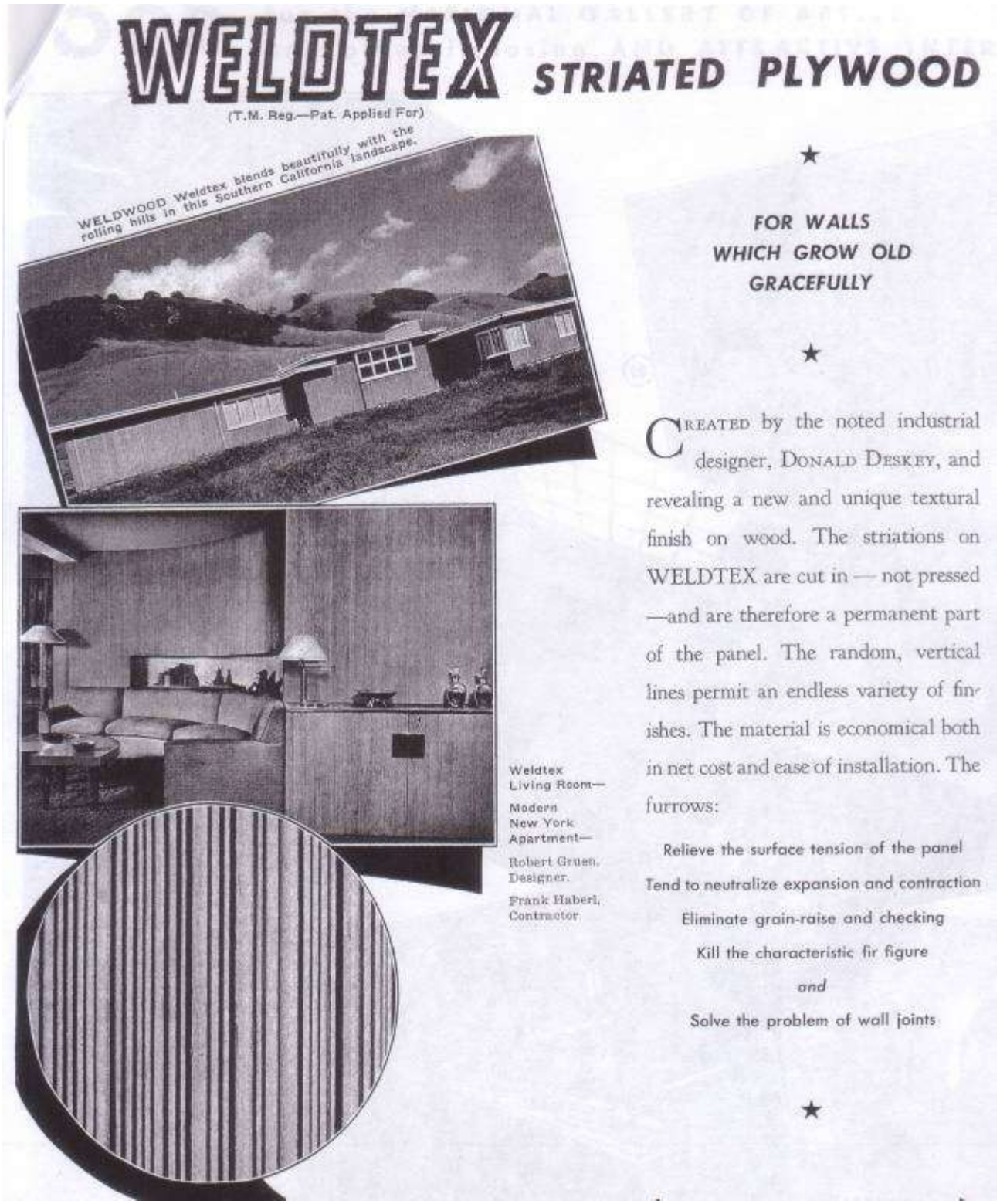

Figure 2.

Source: United States Plywood Corporation. *The Weldwood Catalog of Plywood and Allied Products*. New York: United States Plywood Corporation, 1941. 14.

Weldtex was born of his commitment to modern materials but his dissatisfaction with strict Modernist aesthetics. It was his first invention that combined a technologically advanced material with a traditional, rustic aesthetic. He intended it to be timeless, transcending contemporary design trends and becoming a charming and classic material.

Within six months of filing for the Weldtex patent, Deskey had integrated it into the booming experimental and prefabricated housing industry. However, he wanted to obliterate the idea that prefabricated housing was cheap and useful only for emergency situations. His idea of a prefabricated home centered on the vacation lifestyle. Sportshack was the name given to the first small cabin designed by Deskey for the purpose of vacationing, hunting, skiing, etc. He realized that "people who could afford hunting cabins and ski lodges built them on rural property outside the jurisdiction of discriminatory building codes."[28] With this fact in mind, he designed the cabin to be small enough to be easily erected without "expensive union labor." The main building material (interior and exterior), was Weldtex. Most importantly, as Hanks pointed out, Deskey's design associated Weldtex with luxury rather than necessity. As the sketch from the Donald Deskey archives collection at the Cooper-Hewitt National Museum of Design illustrates *(see figure 3),* Sportshack was a modestly sized home, with minimal ornamentation. It is interesting to note that the focus in the rendering is how the building material of the home (the striated Weldtex) imparted a rough, bark-like texture and echoed the shadows/highlights of the surrounding forest.

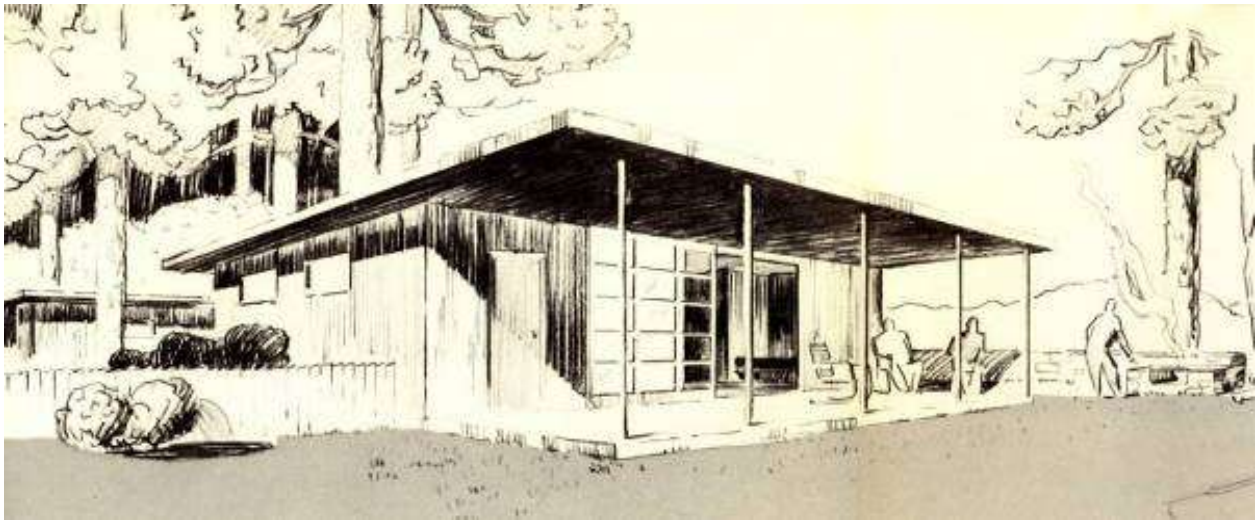

Figure 3.
Source: Donald Deskey Archives, Cooper-Hewitt National Museum of Design, New York.

[28] Hanks, *Donald Deskey: Decorative Designs and Interiors*.125.

The Sportshack first appeared in the Metropolitan Museum of Art's "Contemporary American Industrial Art" show of 1940.[29] Though Deskey's notes dictate Douglas Fir plywood for the Sportshack's Weldtex panels, a New York Times article from April 29, 1940, describes Deskey's cabin interior as "machine rived cedar plywood with paint rubbed in to give a weathered gray effect."[30] In an effort to enforce Weldtex's rustic character, it was finished in a traditional method using paint that was rubbed into the panel. However, there is no indication in any of USP's catalogs that Weldtex was ever offered in cedar. The fact that the author of the article described the plywood as "machine rived" indicates that the material was indeed Weldtex. The mention of cedar was most likely an error on the author's part. Also, prior to the Weldtex partnership, Deskey had not been affiliated with USP. It is interesting that as late as April 1940, Weldtex was still in the process of being marketed as a specific and new material.[31]

The exhibit received favorable attention from design critics such as Walter R. Storey, who reported in the *New York Times* that Deskey's cabin had "considerable practical appeal" and stated that the plywood panels had "beautiful texture."[32] After the positive response from the Metropolitan Museum of Art exhibit, Sportshack was exhibited during the second season of the 1939-1940 New York World's Fair. There, visitors experienced a full-size Sportshack, complete with Weldtex exterior and interior facing. The Sportshack exemplified the complete opposite to the popular streamlined and machine-age look that the other homes at the "Town of Tomorrow" had exhibited in 1939.[33] It was however, by no means a historic design. The use of an exterior grade plywood that was so dramatically textured was unlike traditional cabins. The Sportshack proved to be an ideal showcase for Weldtex. Deskey had finally incorporated a truly modern material which would "satisfy the American desire for reminders of tradition and historical roots."[34] Weldtex was Deskey's effort to use a modern lens to diffuse, or abstract a traditional material (wood paneling). Deskey's desire for a material to take on a "certain patina" later became the inspiration behind the promotional slogan for Weldtex. Deskey was convinced that Weldtex would "grow old gracefully" and that it looked like a "barn door or an antique."[35]

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[29] See the Shelter Industries brochure in the appendix, figures C-E.
[30] "Museum to Exhibit Art of Industries," *New York Times*, April 29 1940.
[31] The exclusion of Weldtex from a USP catalog dating from circa 1940 confirms that it had yet to be officially introduced within the Weldwood line. United States Plywood Corporation, "Plywood," ed. New York Public Library Archives (c. 1940).
[32] Walter Rendell Storey, "Decorative Art: Modern Design," *New York Times*, May 5 1940.
[33] Evidence suggests that the Sportshack was exhibited within the "America at Home" exhibit of the New York World's Fair.
[34] Hanks, *Donald Deskey: Decorative Designs and Interiors*. 125.
[35] Ibid. 126.

By the summer of 1940, Deskey had announced his plans to sell Sportshack plans and specifications through his own company, Week-End Cabins. Deskey's plans were presented in the August 1940 issue of *Esquire,* which stated that the cabins would be available for approximately $1,285. However, according to a USP stockholders meeting report, the wartime regulations of World War II prohibited the manufacture of Weldtex and thus curbed Week-End Cabins' successful production of the Sportshack.[36]

Perhaps even less publicized than the Sportshack exhibits was the third 1940 installment of Weldtex in the *Collier's* House of Ideas in New York City.[37] The House of Ideas did not prove nearly as popular as the Sportshack exhibits and here, Weldtex had been constrained to the walls of the "Combination Room" as the full-size panels were not cut into squares, but applied vertically in whole sheets. This model home, located in bustling Rockefeller Center, was endorsed by *Collier's* (a magazine which targeted a popular audience). Thus, Deskey and Weldtex officially received national exposure in various forms of media.

Despite the general public's positive response to Weldtex, wartime regulations had hindered plywood's mass production. As popular as these three exhibits were, Weldtex production had been limited and profits of Deskey's company and of USP were severely affected.[38] However, Deskey was not ready to give up on prefabricated housing featuring Weldtex. The final attempt at promoting Weldtex as a main component of prefabricated housing occurred in 1946. On February 8, Wilson Wyatt (whom President Truman had appointed United States Housing Expediter for the Office of War Mobilization) had recommended that over the next two years (1946-1948), nearly one million homes should be prefabricated. Almost immediately following Wyatt's recommendation, Deskey had re-introduced Weldtex into a prefabricated design under the company name of Shelter Industries. The homes (manufactured by Winner Manufacturing Company of Trenton, New Jersey) were a modest 29 feet by 21 feet and featured a complete Weldtex skin and interior walls[39], two or three bedrooms, a picture window, a covered terrace, and a slanted roof.[40] The cost of the Shelter Industries homes were planned to be from $4,997 to $5,891, and Deskey had expected to produce nearly 200 a month by the end of 1946.[41]

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[36] Ibid. 126.
[37] See Appendix, figures A & B for illustrations.
[38] The decision of a 1958 court case stated that due to the wartime restrictions, the period between 1940-1945, the profits from Weldtex were less than $190,000. This court case is discussed in further detail later in this essay.
[39] Mary Roche, "Designers Exhibit New Type of House," *New York Times*, May 2 1946.
[40] Hanks, *Donald Deskey: Decorative Designs and Interiors*. 128.
[41] "Plans Pre-Built Homes," *New York Times*, February 28 1946. 42.

Nearly four months later, the Shelter Industries homes were on display at the National Modern Homes Exposition in New York City. The initial public reaction was somewhat positive[42], with orders being offered at department stores such as Wanamaker's[43] and exposure in the national architectural media. Two of the first homes were located in Linden, New Jersey and in a suburb of Connecticut. "Each had taken six men only two and a half days to erect."[44] Though the homes were small and relatively easy to assemble, the company never experienced a boom in sales. According to Hanks, all evidence suggested that Shelter Industries had only stayed alive until the fall of 1947 and that its only major order was for a public housing complex in Stamford, Connecticut. Reflecting on the demise of Shelter Industries, Deskey blamed the raising price of the Ingersoll Utility Units[45] which were contracted to be included in the homes, as well as a six month strike at one of the Winner plants.

Though Deskey's personal ventures with Weldtex had essentially failed, Weldtex's popularity grew with the help of USP.[46] When USP had started to manufacture and market Weldtex in 1940, the product was introduced as part of their prominent Weldwood collection.[47] One of USP's earliest Weldtex pamphlets from 1940[48] proclaimed that Weldtex would "grow old gracefully," a slogan that USP would continue to use throughout its production of the product. The early marketing attempted to attract conservative, traditional consumers to a modern material. Deskey's name was heavily advertised and associated with the product, which was an effort to reinforce the idea that this product was a luxury, designer material that was affordable for most consumers. For example, 1942 catalog immediately advertised that Weldtex was "for walls which grow old gracefully" and identified Deskey as a "noted industrial designer." It further proclaimed that Weldtex's "furrows relieve the surface tension of the

[42] Mary Roche, a popular *New York* Times art critic during the 1940s, wrote of the newly introduced Shelter Industries home: "A new prefabricated house that follows a pleasant middle course between the most advanced modern theories on the one hand and the hackneyed traditional designs on the other…" Roche's comment illustrates exactly the balance that Deskey was attempting to accomplish in his design and use of Weldtex. Roche, "Designers Exhibit New Type of House."
[43] Hanks, *Donald Deskey: Decorative Designs and Interiors*. 130.
[44] Ibid. 130.
[45] The Ingersoll Utility Units included a furnace, water heater and electrical and plumbing connections. For more details on the incorporation of the unit into the homes, see Chapter 6 of Hanks.
[46] USP created numerous catalogs devoted to the Weldwood line. Louis Meyer (as previously mentioned), co-author along with Oscar Fisher, created the catalog in 1950. It was devoted strictly to residential construction, including farm buildings, plywood tents, size specifications and installation methods. The catalog included plans for "economical building" with costs ranging from $2,000 to $5,000. Oscar & L.H. Meyer Fisher, *Plywood Handbook of Residential Construction* (New York: United States Plywood Corporation, 1950).
[47] Perry's "Modern Plywood" even included Weldwood in the glossary. The definition of Weldwood was: "Trade designation of the United States Plywood Corporation, applied to all of their plywood. When branded Waterproof Weldwood, the product is resin bonded and suitable for exterior sues. Further designations, aircraft or marine, indicate purposes for which such plywood may be used." (23).
[48] **See figure 4.**

panel, tend to neutralize expansion and contraction, eliminate grain-raise and checking, kill the characteristic fir figure and solve the problem of wall joints." [49]

The marketing process of Weldtex seems to have evolved through three distinct phases. Weldtex began as a modern material that evoked rustic and traditional tones in prefabricated construction (as previously discussed with Sportshack and Shelter Industries). Weldtex evolved into a material used for high-style design, including office and commercial spaces. Finally, and most successfully, Weldtex was positioned by USP to appeal to residential consumers, for every-day, do-it-yourself projects.

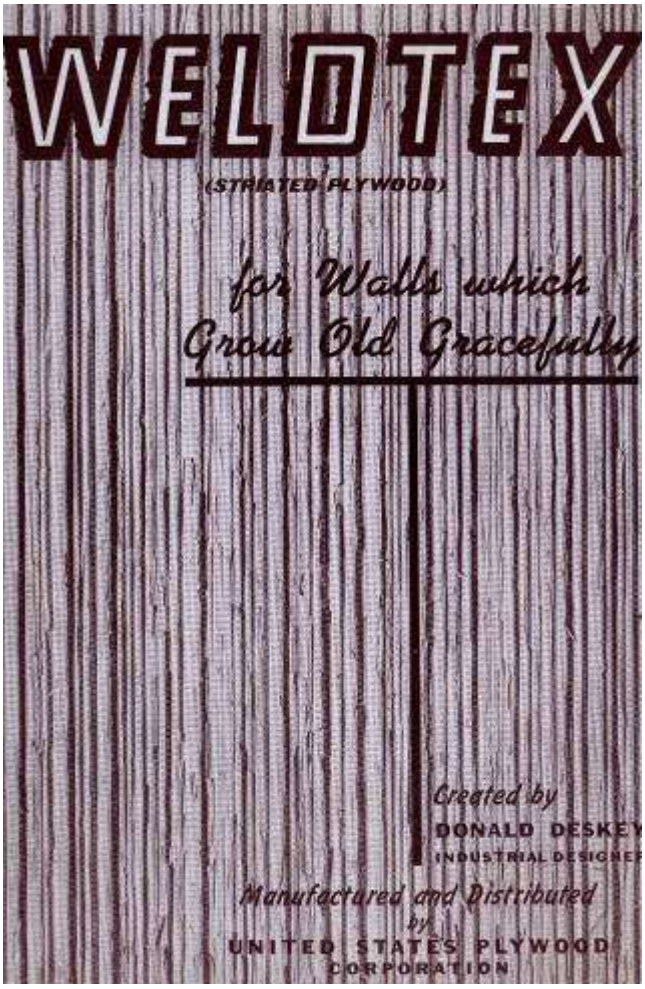


Figure 4.
Front cover from a 1940 Weldtex Pamphlet from United States Plywood Corporation.
Source: Donald Deskey Archives, Cooper-Hewitt National Design Museum, New York.

In Weldtex's infant years, it was sold strictly as a wall paneling and was mainly available in two grades both of which came in 48" by 96" panels. The interior grade was 5/16" thick and the exterior was available in the common 3/8" thickness although early 1940 pamphlets stated that other thicknesses could "be had on special order if quantities" were involved."[50] Weldtex received press in a wide variety of journals and magazines starting in 1940 and by 1947[51], Weldtex had been well recognized in mainstream American industrial design. Trade books and interior design manuals alike included Weldtex as a modern material worthy of attention. The August 1947 issue of Architectural Record included an article on Weldtex, which read:

[49] United States Plywood Corporation, "Weldwood," in *Sweet's Architectural Catalog File* (New York1942). 7. See figure 5.
[50] The 1952 sales manual had varying measurements of available panels depending on the type of wood, as well as the use (interior or exterior). Refer to the appendix figures G & H for a copy of the manual.
[51] Documented advertisements or articles pertaining to Weldtex have been found in Architectural Forum, Architectural Record, Arts & Architecture, Inland Architect, Popular Science, Popular Mechanics and Collier's. However, these journals and magazines are only a sampling of what is most likely available for further documentation and research.

> Weldtex, the plywood panel designed by Donald Deskey, has striations cut into the outer layer of plywood veneer, giving an unusual finish of parallel, random-width lines. It is said to be moisture-resistant for interior installations, and waterproof for exterior use. Textured effects can be varied by alternating the direction of the striations, and the board can be applied to either flat or curved surfaces.[52]

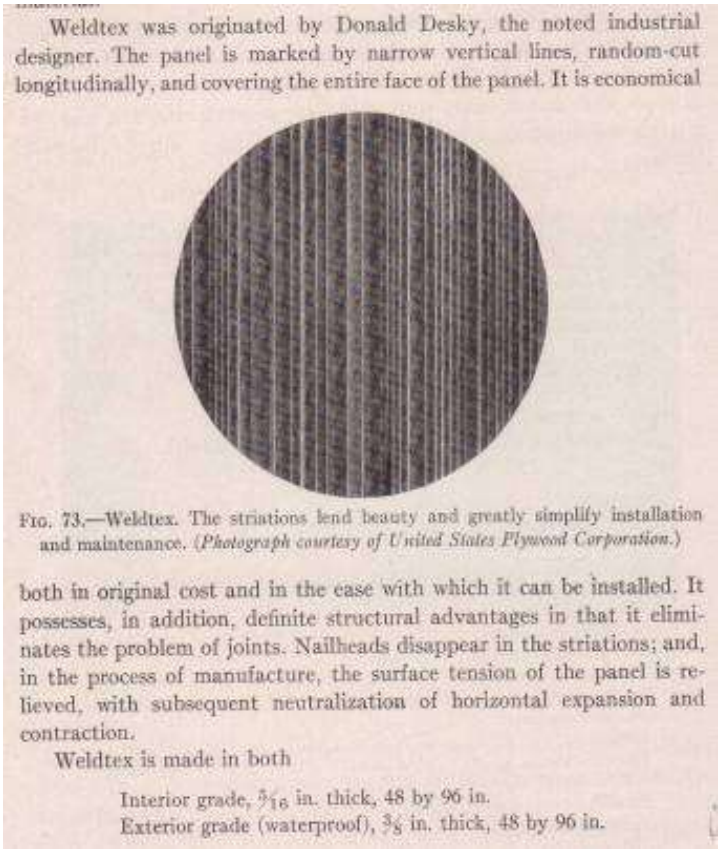
Louis Meyer's book, *Plywood; What It Is, What It Does*, included Weldtex in the chapter on softwoods and touted its advantages: ease of installation , affordabilityas well as its ability to mask visual disturbances, such as checking. Meyer also stated that the material was available in both interior and exterior grades of varying size and dimension *(see figure 6).*

Interior design manuals of the time, such as Decorating Livable Homes by Elizabeth Burris-Meyer,[53] intended to "acquaint the consumer with the basic facts concerning the materials of decoration and the processes by which these materials may be used to achieve the desired effects in a livable home."[54] Weldtex was one of the materials discussed under the chapter heading of "Structural Finishes." The photograph *(see figure 7)* depicted square Weldtex panels, arranged in diagonals in combination with "quartered sliced walnut" on the wall of a "modern office."[55]

[52] "Plywood Paneling," *Architectural Record* (1947).
[53] *Decorating Livable Homes* apparently published five editions starting in 1937 and ending in 1951. Coincinedently, Elizabeth Burris-Meyer and Louis Meyer share identical surnames. However, there is no direct evidence indicating that the two were married or related.
[54] Elizabeth Burris-Meyer, *Decorating Livable Homes*, Second ed. (New York: Prentice-Hall, Inc., 1947). Vii.
[55] Ibid. 29. Burris-Meyer also included a photograph of Weldtex on page 45, where it illustrated that the striations lent "themselves to a great variety of designs and finishes."

Figure 5.

Source: United States Plywood Corporation. "Weldwood." In *Sweet's Architectural Catalog File*. New York, 1942.



Weldtex was originated by Donald Desky, the noted industrial designer. The panel is marked by narrow vertical lines, random-cut longitudinally, and covering the entire face of the panel. It is economical

FIG. 73.—Weldtex. The striations lend beauty and greatly simplify installation and maintenance. (*Photograph courtesy of United States Plywood Corporation.*)

both in original cost and in the ease with which it can be installed. It possesses, in addition, definite structural advantages in that it eliminates the problem of joints. Nailheads disappear in the striations; and, in the process of manufacture, the surface tension of the panel is relieved, with subsequent neutralization of horizontal expansion and contraction.

Weldtex is made in both

Interior grade, $\frac{3}{16}$ in. thick, 48 by 96 in.
Exterior grade (waterproof), $\frac{3}{8}$ in. thick, 48 by 96 in.

Figure 6.
Source: Louis H. Meyer. *Plywood: What It Is and What It Does.* New York: McGraw-Hill Book Company, Inc. 1947 (140).

Figure 7.
Source: Burris-Meyer, Elizabeth. *Decorating Livable Homes*. Second ed. New York: Prentice-Hall, Inc., 1947, 29.

The third and last phase of the Weldtex campaign came post World War II, when the restrictions on plywood production were lifted. The immediate post-war era also produced an intense need for new homes, and along with new homes came the demand for new and technologically advanced materials. With the influx of homeowners and income, the demand for Weldtex increased. Thus, the shift towards marketing Weldtex as a readily available material for the average home-owner was started. These early post-war advertisements set the tone for the rest of the Weldtex campaign. The advantages of Weldtex included practical reasons such as economy of material (low cost), east of installation, durability and strength, and the ability to "take any finish"[56]. However, Weldtex also offered aesthetic advantages, such as being a warm and textured material that had the ability to mask imperfections, seams fasteners, such as nails. USP continued to tout these advantages throughout its marketing of the product. With the influx of Weldtex advertising after 1945, this third phase proved most to be the most successful for Weldtex, in terms of generated profits and popularity. The end of the war sparked a significant shift in target marketing strategy.

The target emphasis prior to 1945 was professional journals and publications geared towards architects and designers. However, starting in 1946/1947, USP ran advertisements for the Weldwood products (especially Weldtex) in commonly attained household magazines, with the hopes of attracting the newly formed target base of the new families started by those returning from war.[57] In anticipation of the increase in decorative plywood consumption by homeowners after the war, USP heavily marketed the Weldwood line. The *Beautiful Wood for Beautiful Homes - with Weldwood* catalog from 1944 is proof of anticipated economic boom. It stated, "Numerous new, war-tested Weldwood products are certain to play an important role in America's peacetime economy."[58] USP produced an advertisement reaching out to the average consumer with the headline, "Mr. & Mrs. America are doing their post-war planning with Weldwood!" *(see figure 8).* The advertisement mentions all of the features that would later become hallmark traits of USP marketing campaign: post-war material which was affordable, modern, beautiful, and easy to install.

[56] United States Plywood Corporation, "For Architectural Design and Building Construction: Weldwood Plywood and Allied Products," in *Sweet's Architectural Catalog File* (New York1960). 6.
[57] See the appendix figure I for a prime example.
[58] United States Plywood Corporation, *Beautiful Wood for Beautiful Homes - with Weldwood* (New York: United States Plywood Corporation, 1944). 14.

Figure 8.

Source: United States Plywood Corporation. "Weldwood Plywood (Advertisement)." *Pencil Points* (January 1945): 121.

USP continued these traits of the Weldwood line. Marketing campaigns from the late 1940s attempted to appeal to the common homeowner by highlighting the material's "great structural strength…economy…and the speed of erection."[59] Weldwood products (including Weldtex) were suggested as materials for "remodeling and new construction."[60] In the late 1940s, Weldtex started to appear in various experimental and exhibition homes.[61] In 1947, *Everyday Art Quarterly*[62] featured the Idea House II, designed by William Friedman, Hilde Reiss and Malcolm E. Lein that included large amounts of plywood, which was considered a material that was "readily available" for "standard construction methods."[63] A bedroom of the house featured Weldtex panels painted "mat black", which added a large dramatic element to the room *(see figure 10).* Another example of the use of Weldtex was in the 1948 Westinghouse Garden-View Kitchen as exhibited at Namm's department store in Brooklyn, and designed by the staff of the *House & Garden* magazine. The kitchen of the home featured as "pink-toned Weldtex walls" and counter-tops as a "refreshing change from all-white work."[64]

By the late 1940s, Weldtex was being used for various purposes, including exterior siding, wall paneling, ceiling tiles, and interior uses such as on furniture, cabinetry, fireplaces and lamp stands.[65] Weldtex was featured in the "Forward House," which was exhibited at Macy's Department Store in early 1947. The home had bedroom furniture with blue lacquered Weldtex drawer fronts and living room furniture of green Weldtex.[66] By 1949, Mary Roche had claimed that "Textured materials like

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[59] See *Figure 9.* ———, "Weldwood Plywood (Advertisement)," *Architectural Record* 99, no. 3 (1946).

[60] Ibid.

[61] Roche of the *New York Times* covered numerous homes which featured Weldtex. Some examples of these articles include: "Designers Exhibit New Type of House" (May 2, 1946); "New Materials in Furniture Show" (January 28, 1947); "One-Story City House" (October 19, 1947); "Victorian into Modern" (January 11, 1948); "6 Rooms Attuned to Musical Satire" (October 5, 1948); "California Formula for a Living Room" (March 27, 1949); and "The Made-to-Measure House" (July 10, 1949). There is also speculation that Weldtex appeared in "The Weldwood House" which was exhibited in the Chicago region in January 1957. The *Chicago Tribune* advertisement grabbed the readers' attention by stating "Come see the 'Dream House' that came true!" and lists some details of the new home, including "unusual textured and grooved Weldwood Paneled Walls." The home was designed by architect Harry J. Quinn and "furnished and decorated by *Living for Young Homemakers* magazine." (See "Come See The "Dream House" That Came True!," *Chicago Daily Tribune*, January 21 1957.)

[62] Started in 1946 by the Walker Art Museum of Minneapolis, Minnesota, the *Everyday Art Quarterly was* the first design journal issued by a museum.

[63] "Idea House 2," *Everyday Art Quarterly*, no. 5 (1947). 4.

[64] "Luxurious Kitchen Goes on Exhibition," *New York Times*, May 11 1948.

[65] Refer to Edith Sonn, "Standards for New Homes," *New York Times*, August 29 1948.; Mary Roche, "6 Rooms Attuned to Musical Satire," *New York Times*, October 5 1948.; and "Macy's (Advertisement)," *New York Times*, February 15 1948.
See appendix Figure J.

[66] Mary Roche, "New Materials in Furniture Show," *New York Times*, January 28 1947. Also refer to Roche's other articles: , "Victorian into Modern," *New York Times*, January 11 1948, "Space Saver! All Purpose Unpainted Wood Cabinet Double Sliding Doors (Advertisement)," *New York Times*, May 22 1955.

Weldtex" were "beloved by contemporary architects."[67] Weldtex had officially entered into the consciousness of both the architect/designer and the individual.

Figure 9.
Source: United States Plywood Corporation. "Weldwood Plywood (Advertisement)." *Architectural Record* 99, no. 3 (1946): 180.

[67] Mary Roche, "California Formula for a Living Room," *New York Times*, March 27 1949.

Figure 10.
Source: "Idea House 2." *Everyday Art Quarterly* no. 5 (1947): 7.

Plyweave, which has a pattern of broken parallel lines imposed on either fir or redwood.

All of the textured types hide nailheads well and minimize occasional misfits between panels. You can also get a plastic-paper-faced plywood made especially for painting.

Precuts save work. One of the newer kinks in plywood are the narrow planklike panels called Plankweld. These are 16¾" wide to match the usual spacing of wall studs and come prefinished to save work. Costing around 55 cents a square foot, they are more expensive than the standard 4′ by 8′ panels, but are simpler to use since they eliminate much of the cutting, fitting and bruting around of the big sheets.

Precut squares of 5/16" striated Weldtex are another work saver. These come in 12", 16" and 24" sizes and are especially effective if put up with the direction of the grooves alternated, producing a checkerboard effect. Many of the regular plywoods are also available in nonstandard sizes like 3′ by 4′, 4′ by 4′.5′ by 7′ and 3′ by 6′.

Looking at the ceiling is easy with this checkerboard arrangement of 5/16" Weldtex squares. Squares come in 12", 16" and 24" sizes, cost around 30 cents a square foot.

Raised-panel effect is obtained by first nailing up narrow backing strips and then bridging them with big panels nailed on top. Space panels about 1" apart.

Figure 11.
Source: Huff, Darrell. "How to Panel with Plywood." *Popular Science*, February 1953, 205.

tile, linoleum or hardwood flooring, later.

Q. Our living room ceiling has a persistent crack that's defied a dozen patching jobs. We've investigated replacing the whole ceiling, but that's much too expensive. Can you suggest something?

A. Yes. Weldtex® squares, which can be attached to low-priced furring strips, will end your cracking and patching troubles. Weldtex has a distinctive striated texture which can be painted or finished natural. Sizes of squares are 11⅞", 12", 16" and 24". And it's not expensive! Enough Weldtex squares to cover a full 10′ x 12′ ceiling will cost you less than $35.

HAVE A QUESTION?

Send it to "The Weldwood Question Box," 55 West 44th Street, New York 36, N. Y.

Figure 12.
Source: United States Plywood Corporation. "Ideas from Weldwood." *Popular Science*, July 1956, 63.

By the early 1950s plywood had become the most common material used for low-cost renovations for common areas in residential uses such as basements, "romp rooms" or recreational rooms and family rooms. USP realized the enormous advantage of Weldtex to mask damaged ceilings. Thus, advertisements touted Weldtex as a common material used to cover up damage to ceilings and walls, as by being attached to furring strips, it would completely cover and in effect, serve as a "work saver" and patch for "persistent cracks" in plaster ceilings (*see figure 11*).[68] A 1944 Weldwood catalog devoted an entire page towards promoting Weldwood products as the ideal material for renovations. The headline read, "New Rooms for Old…Almost Overnight." It continued: "from covering up old cracked walls and ceilings to forming new partitions and finishing 'unfinished' rooms, you'll find many a worthwhile advantage in using Weldwood Utility Panels."[69] A 1956 installment of a Weldwood Question Box serves as a prime example of this USP marketing strategy. USP also proposed that Weldtex as a "low-price" option that was easily installed using furring strips. Sizes available were listed as 11 ½", 12", 16" and 24" (*see figure 12*). Weldtex, especially, was proposed as being a product of "beauty and budget."[70] It was also during this time that patterns for ceiling arrangements of Weldtex became readily available. Other non-USP sponsored articles appeared in various mediums such as trade/professional journals, popular magazines and design books, all encouraged the use of Weldtex in ceiling panels and particularly in the checkerboard pattern *(see figures 14 & 15).*

In further attempt to appeal to homeowners, USP advertisements (clearly aimed towards homeowners) claimed that the interior Weldwood products (including Weldtex) were "guaranteed for the life of the building."[71] As early as 1945, USP was attempting to champion the attractiveness of the material, as well as its practical advantages. A November 1945 advertisement from *Architectural Record* depicts a cozy living room with a glowing fireplace, appropriately paneled in Weldtex. The rough texture of Weldtex supposedly mimicked a rustic and "warm hominess" that "radiated from every corner" *(see figure 16).*[72]

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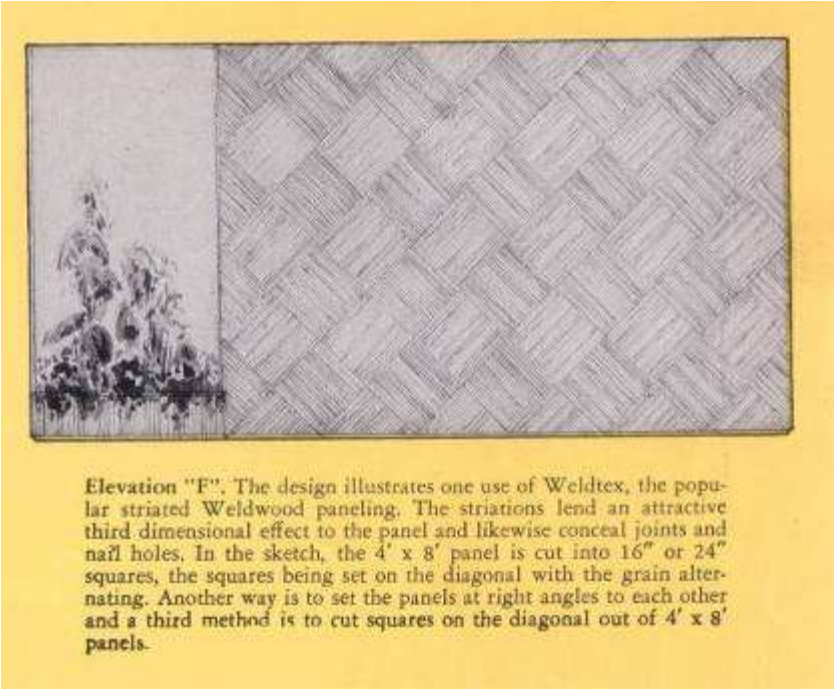
[68] See Jedd S. Reisner, "Wall-Surfacing Materials for 'Unfinished' Rooms," *New York Times*, September 25 1949. and Darrell Huff, "How to Panel with Plywood," *Popular Science*, February 1953.
[69] United States Plywood Corporation, *Beautiful Wood for Beautiful Homes - with Weldwood*. This catalog also specifically mentioned and advertised Weldtex numerous times.
[70] *See figure 13.* ———, "Weldwood Plywood (Advertisement)," *Pencil Points* (1945). 42.
[71] ———, "Choose Your Style, Then Choose Weldwood for the Interior (Advertisement)," *Arts & Architecture* (1947). See appendix figure I.
[72] ———, "Weldwood Plywood (Advertisement)," *Architectural Record* 98, no. 5 (1945).

Figure 13.
Source: United States Plywood Corporation. "Weldwood Plywood (Advertisement)," *Pencil Points* (March 1945) 42.



Elevation "F". The design illustrates one use of Weldtex, the popular striated Weldwood paneling. The striations lend an attractive third dimensional effect to the panel and likewise conceal joints and nail holes. In the sketch, the 4′ x 8′ panel is cut into 16″ or 24″ squares, the squares being set on the diagonal with the grain alternating. Another way is to set the panels at right angles to each other and a third method is to cut squares on the diagonal out of 4′ x 8′ panels.

Figure 14.

Source: United States Plywood Corporation. *Weldwood Plywood for Interiors: Installation Booklet*. New York: United States Plywood Corporation, 1946, 9.

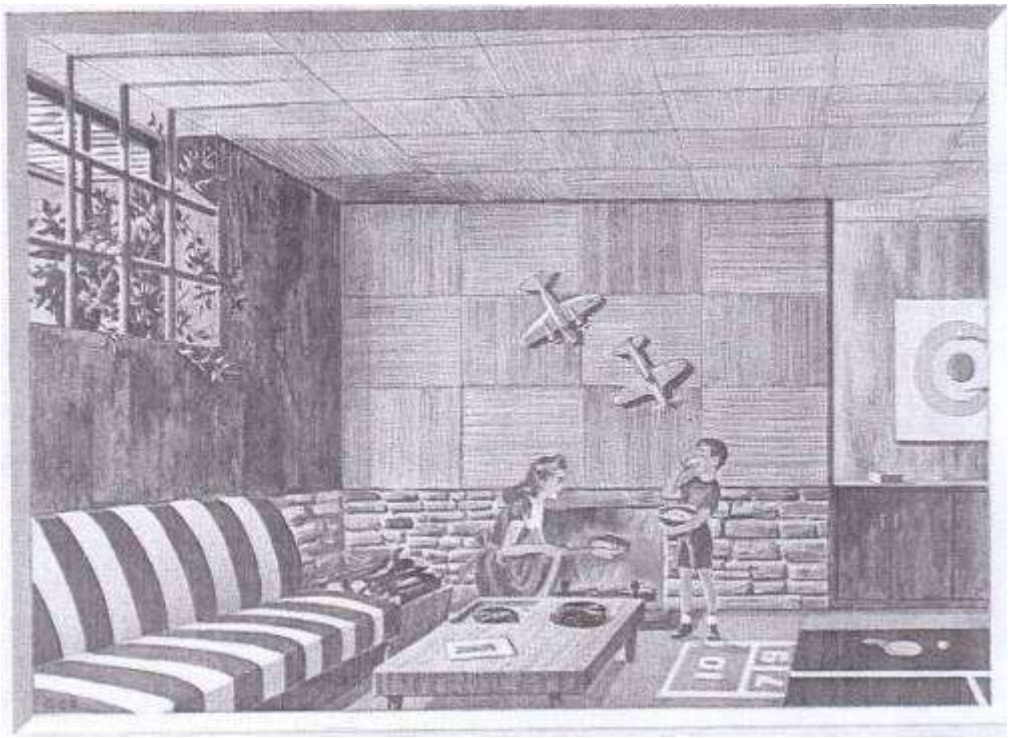


Figure 15.

Source: United States Plywood Corporation. *Beautiful Wood for Beautiful Homes - with Weldwood*. New York: United States Plywood Corporation, 1944, 8.

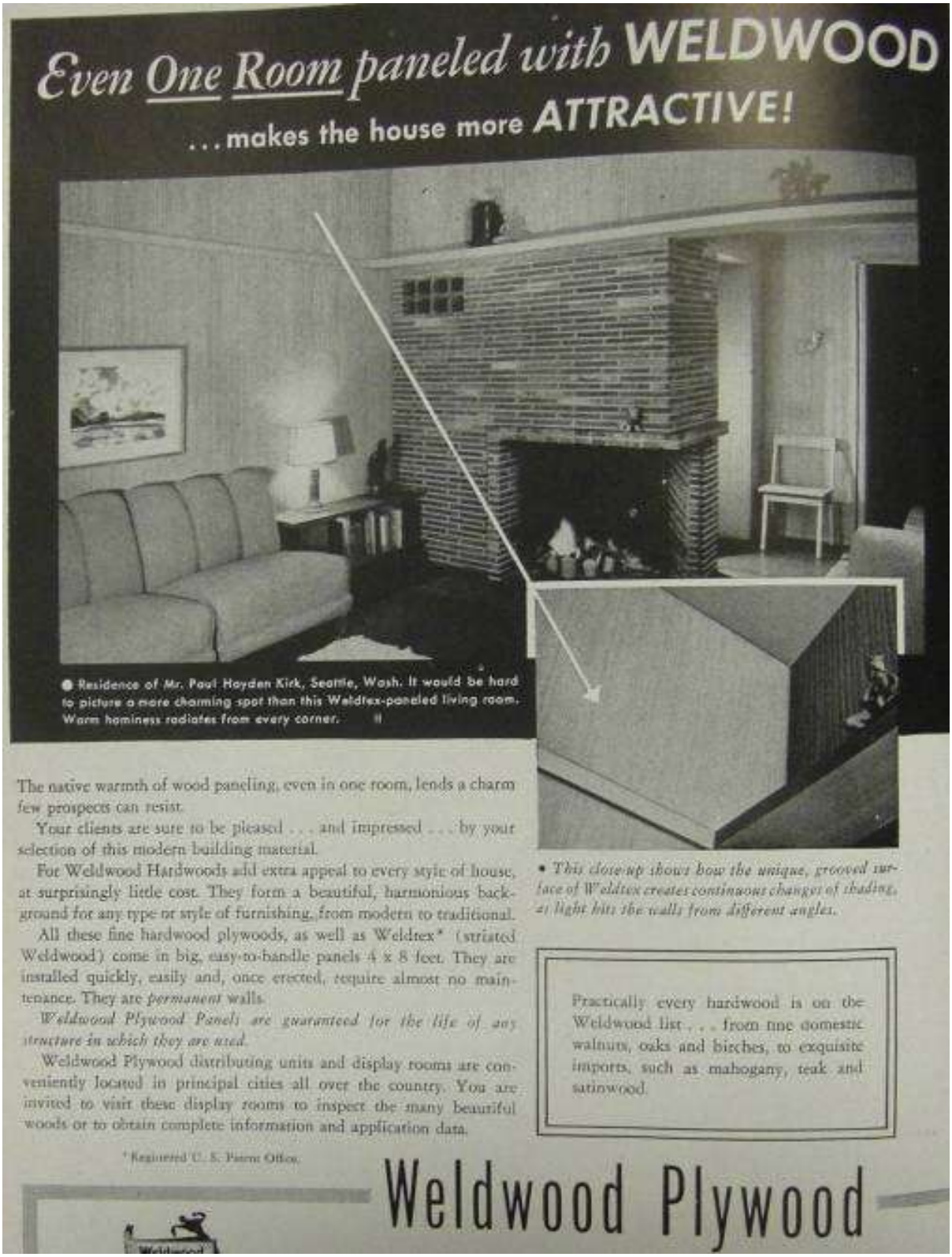


Figure 16.

Source: United States Plywood Corporation. "Weldwood Plywood (Advertisement)." *Architectural Record* 98, no. 5 (1945): 202.

Evidence suggests that until 1949, Weldtex had only been available in Douglas fir. However, two documents exist which refer to the availability of other species of wood for Weldtex. The first is an article from February, 16, 1949 which stated the Weldtex had previously only been available in fir and other softwoods, but that it had "proved so popular that we [USP] are producing it in hardwood to give a wider selection and use…"[73] The second document is a 1952 Weldwood Sales Manual, which states that it [Weldtex] was being used for wall paneling, ceiling paneling and cabinet work and was available in hardwood species such as "Southern Gum, Philippine Mahogany and Redwood."[74] Weldtex has reached the height of its popularity by 1950, and by 1958, USP reported that profits from Weldtex "had been in excess of $56,000,000," – an astronomical amount by 1958 standards.[75] However, it continued to be available through local lumber retail stores and hardware stores throughout the 1950s and up until approximately 1968 (see *figures 17 & 18*).[76]

By the mid 1950s, Weldtex had proven so popular that rival corporations and manufacturers had attempted to replicate the material. In February of 1955, the Georgia-Pacific Corporation (the main competitor of USP) had started the manufacture of their variation of Weldtex, and marketed it as such, without changing the name. Within a month (after having received a sample of it from Georgia-Pacific), USP responded with an official letter threatening legal action if Georgia-Pacific continued its infringement and use of the patented term "Weldtex." In fact, USP would receive the rights to the trademark for Weldtex, just a few months later on July 26, 1955.[77] In 1956, USP filed a lawsuit against Georgia-Pacific Corporation claiming infringement upon the Weldtex patent.[78] The Southern District Court of New York found in favor of Georgia-Pacific, dismissing the plaintiff's (USP) claims and issued a declaration of invalidity of Deskey's patent and non-infringement on the Georgia-Pacific's behalf. USP appealed the decision to the US Court of Appeals Second Circuit court. Judge Lumbard rendered his opinion on July 1, 1958, reversing the district court's judgment, on the basis that Deskey's patent was valid and was indeed infringed upon by Georgia-Pacific.

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[73] "U.S. Plywood Offers New Product," *New York Times*, February 16 1949.
[74] The 1952 sales manual images relating directly to Weldtex may be seen in appendix figures G & H.
[75] "U.S. Plywood Wins Patent Case Ruling," *New York Times*, July 3 1958.
[76] Jackson Hand, "New Plywood: Wild Colors & Textures," *Popular Science*, September 1968. 159. For an explanation of how the year 1967/1968 was determined, refer to footnote 86.
[77] According to the Trademark Electronic Search System (TESS) on the United States Patent & Trademark Office website, Weldtex was filed for a trademark on December 2, 1948 and the trademark was granted on July 26, 1955. United States Patent & Trademark Office, "Trademark Electronic Search System (Tess), Keyword: Weldtex," http://tess2.uspto/gov/bin/showfield/f=doc&state=4005:osfmkm.2.2.
[78] 148 F.Supp. 846.

Figure 17.
Source: "Hill-Behan Lumber Company (Advertisement)." *Chicago Daily Tribune*, December 6 1959, SW15.

Figure 18.
Source: United States Plywood Corporation. "Make Your Home Look Like New inside and out with Low-Cost Weldtex! (Advertisement)." *Popular Science*, April 1955, 254.

The Circuit Court found in favor of USP on the following grounds: U.S. Plywood's Weldtex product had been well recognized in the plywood industry for more than thirteen years; Deskey's invention had been tested by a third party and found to be successful in "reducing the tendency for visible and actual cracks to appear between abutting panels," and prevented "surface checking, not merely by hiding the checks due to the presence of the grooves, but by relieving the stresses that cause such checks to appear in plywood with solid faces;"[79] Georgia-Pacific's product striated not only the face ply but also the reverse ply; Georgia-Pacific's claim that their product did not infringe on the Deskey patent because it applied uniform grooves, rather than random, was invalid and insufficient to "escape infringement."[80] The reasons argued by Lumbard are interesting, for they take into consideration prior art concerns[81], as well as the commercial success of US Plywood's Weldtex.

The court argued that while striation was used in prior attempts at confining checking and stressing of plywood, earlier products had not concerned plywood panels but had been previously "confined primarily to shingles and other solid lumber products"', nor had they *grooved* the wood. Previous methods had incorporated surface scratches, slits or cuts. The circuit court found that these prior attempts had been cutting the wood, "rather than a gouging operation, and no wood was removed."[82] Deskey's invention, it was found, had created grooves that were "considerably more than surface scratches, many of them necessarily extending beyond the median of the ply so as to break up the hard summer and fall grain which wanders through and in and out of the plane of the face ply." In effect, surface stresses would be localized to the ribs (striations), rather than running through the entire ply. A 1953 issue of *Popular Science* serves as an excellent example of how different Weldtex's texture was compared to comparable products available on the market during that time (*see figure 19*).

[79] Jr. Joseph Edward Lumbard, "Georgia-Pacific Corporation V. Untied States Plywood Corporation," ed. United States Court of Appeals Second Circuit (1958).
[80] Ibid.
[81] In the Intellectual Property field, "prior art" generally refers to earlier attempts at similar or comparable products or patents. Prior art searches are typically conducted before filing for a patent applications which claims originality.
[82] Joseph Edward Lumbard, "Georgia-Pacific Corporation V. Untied States Plywood Corporation."

In regards to the commercial success of USP's Weldtex, the Circuit court reported that "despite severe wartime restrictions on production, over 340,000,000 square feet of Weldtex were sold from 1940 to 1956 in the United States alone, a wholesale volume totaling $56,000,000 for those years."[83] The court argued that by 1955, when Georgia-Pacific had started to manufacture their version of Weldtex, the name had already become popular and had proved to be a profitable product. Lumbard's decision quoted Georgia-Pacific's laboratory chief as having begun the manufacture of Weldtex because it was "extremely advantageous from a profit standpoint."[84] Lumbard also noted the probability that US Plywood would not have paid over $533,000 in royalties[85] to Deskey (from 1940 to 1956) if there were a "substantial likelihood that the rest of the industry could manufacture the product free of the patent."[86]

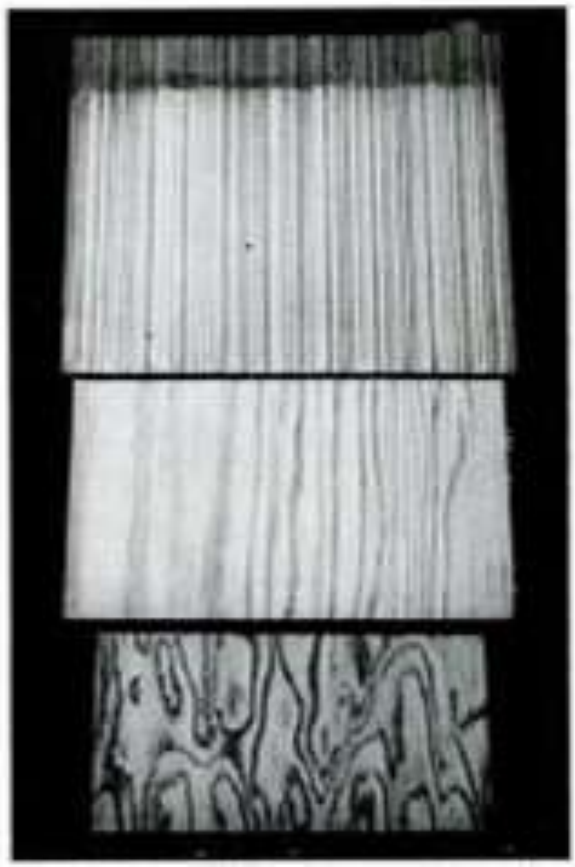

Figure 19.
The top panel depicts Weldtex as compare d to similar products on the market in 1953.
Source: Rogers, John. "Shopping for Plywood." *Popular Science*, September 1953, 68.

The Circuit Courts decision was reported in the *New York Times* just two days later.[87] On July 4, a press release was announced stating that Georgia-Pacific Corporation was going to appeal the decision from the Circuit Court of Appeals and would ask the Supreme Court to hear the case. According to the *New York Times* article, "the Georgia-Pacific spokesman said the company had sold less than $2,000,000 of the product since it began production in 1955. He added that the company intended to continue making the panel."[88] The lawsuit continued to be appealed until 1971 when the United States Court of Appeals, Second Circuit, reduced the award amount to USP from $800,000 "plus interest at the rate of six per cent per annum from the date of last infringement,

[83] The court included an endnote which stated that due to the wartime restrictions, the period between 1940-1945, the profits from Weldtex were less than $190,000.
[84] Joseph Edward Lumbard, "Georgia-Pacific Corporation V. Untied States Plywood Corporation." 9.
[85] A 1956 amount of $533,000 is equivalent to approximately $4,000,000 dollars in 2008. Also refer to footnote # 68.
[86] Joseph Edward Lumbard, "Georgia-Pacific Corporation V. Untied States Plywood Corporation." 9.
[87] "U.S. Plywood Wins Patent Case Ruling."
[88] "High Court Review on Weldtex Asked," *New York Times*, July 4 1958.

September 1, 1958" to a base of $570,000.[89] While a small victory for Georgia-Pacific, the prior decision of the Circuit court had been upheld and USP's Weldtex patent was finally recognized as specific and legitimate.

Though the lawsuit was hardly fatal to Weldtex's popularity, evidence suggests that by the time that Georgia-Pacific had its final judgment in 1971, Weldtex had been discontinued in the Weldwood line by USP. In 1967, Weldtex made its final appearance in architectural supply catalogs[90] while the last advertisement found in popular literature is in *Popular Science* from September 1968.[91] This roughly coincides with the 1967 merger of USP and Champion Papers, Inc., a major manufacturer of wood-derived products such as paper and pulp. Though the merger was anticipated to be extremely beneficial for both parties, general sales had dropped by the early 1970s and by 1972 the company changed its name to Champion International Corporation. Any trace of the USP stamp had disappeared. By 2000, the International Paper Company had acquired Champion International and the emphasis on architectural Weldwood had completely been dropped.

Deskey's design intention behind Weldtex was recognized among professionals within the construction and building industry from an early date. A 1944 paper entitled "New Materials That Supplant So-Called Prefabrication" was submitted for the Wood Industries Division of the American Society of Mechanical Engineers meeting. The author, R.L. Davidson, strongly supported Weldtex:[92]

> If manufacturers will stop trying to introduce substitute materials which are artificial imitations of traditional materials and design materials so as to cause the same basic psychological reactions as some of the traditional materials, the public will go for these materials… [Weldtex] is an outstanding example of a material which gives the 'homey' feeling of hand craftsmanship and of antique weathered wood without in any way trying to imitate antique wood. There is a warm quality about this irregular textured surface which is completely lacking in many modern materials. It is completely acceptable to both traditionalists and modernists because it suggests craftsmanship but is not a cheap imitation of hand-rived shingles or hand-hewn beams. Also, it 'grows old gracefully' which is an important quality to strive for. Modern materials can be given a homey quality which will be preferable to many of the slick machine finishes that are more suggestive of hospitals than of homes.[93]

[89] "Georgia-Pacific Corporation V. U.S. Plywood-Champion Papers Inc.," (United States Court of Appeals, Second Circuit, 1971).
[90] A search of Sweets Architectural Catalogs from 1940 to 1980 revealed that the last year USP advertised Weldtex was 1967. Weldtex was listed in the catalog index, but was not prominently advertised as in previous years.
[91] Hand, "New Plywood: Wild Colors & Textures." 158.
[92] Though the meeting was canceled prior to commencement, the submitted papers were published.
[93] R.L. Davidson, "New Materials Will Supplant So-Called Prefabrication," in *Wood Industries Division of the American Society of Mechanical Engineers (A.S.M.E.)* (New York: ASME, 1944). 22.

Though Weldtex has been forgotten in architectural and material histories, it was a product that swept the nation. Weldtex was featured in various situations, ranging from world fair exhibitions, to architect-designed homes, to weekly ads for "rumpus room" renovations. It was successful and had won both USP and Deskey a considerable celebrity status within the design industry. The product proved to be the stable and versatile material that post-war consumers had craved. It had provided a traditional aesthetic with technologically advanced materials and methods. Weldtex was one of the rare materials that had a famous designer's name attached to it, yet was cheap enough for average consumers to purchase and install themselves. By the late 1960s, the widespread use of Weldtex waned but its reputation persisted. Deskey's hope for Weldtex (that it would "grow old gracefully") had been achieved. Though its demise within the industry was nearly four decades ago, Weldtex's popularity spanned nearly thirty years during a time when new products and materials were constantly being invented and manufactured, -it received professional and popular acclaim for a considerably long period of time compared to rival products.

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