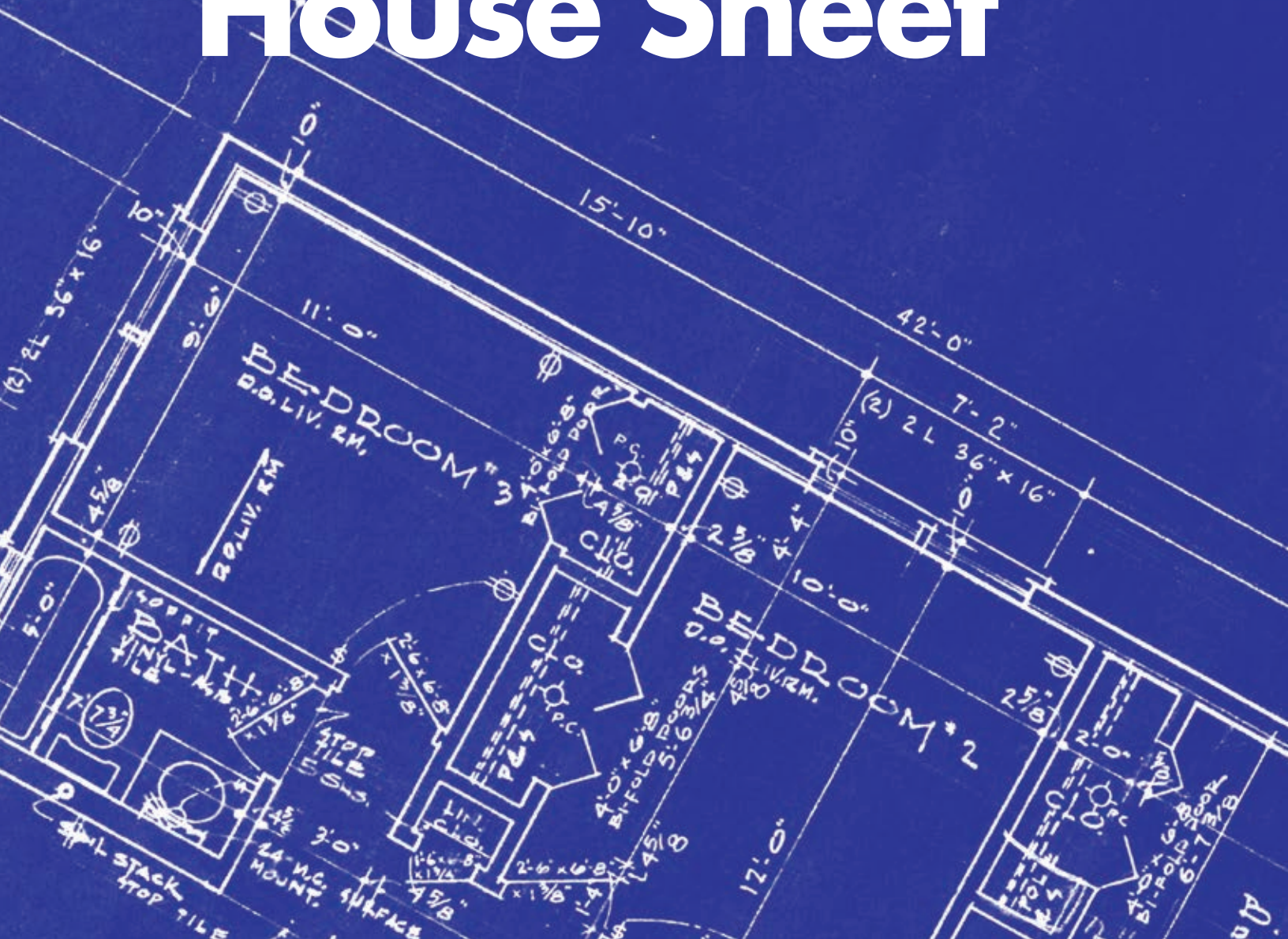


A hand-drawn floor plan of a kitchen layout, tilted at an angle. The plan includes the following labels and dimensions:

- SINK**: Located in the upper left area.
- 36" RANGE HOOD**: Located above the range.
- RANGE**: The cooking area, with a dimension of **36"** indicated.
- OVEN SPACE**: Located to the right of the range.
- SP. LASH**: A label with an arrow pointing to a specific area.
- 48" 48"**: Dimensions for a large rectangular area on the left.
- R36**: A label with an arrow pointing to a rectangular area below the sink.
- 024**: A label with an arrow pointing to a rectangular area at the bottom right.
- FIT**: A label at the top right corner.

Building a House Sheet





FLO HELPS KEEP YOUR JOBS ON-TIME AND ON-BUDGET

YOUR PROJECTS DESERVE A HIGH-QUALITY HOUSE SHEET,
NOT A HOUSE OF CARDS.

FLO IS:

**Designed for reliable on press performance, and with
color reproduction capability to consistently handle even
the most demanding job**

**Backed by domestic supply chain support,
therefore minimizing lead-time**

**Supported by our trusted Printer Technical Service team,
before and after the sale**

Budget friendly to generate cost savings

Made with 10% Post-Consumer Recycled Fiber

**Environmentally responsible with FSC® and SFI® Chain of
Custody certifications, Lacey Act compliant, and 100%
of the electricity used to manufacture Flo sheets is generated
with Green-e® certified renewable energy**



Building a House Sheet





Building a house sheet from the ground up

Building a house from the ground up is a complicated process. It takes expert planning, careful selection of materials and skilled craftsmanship to get it right. The same rules apply to building a printer's house sheet. You have to think through the performance characteristics, user requirements and end goals to get the paper you want.


And that's exactly how we built Flo, Sappi's recommended house sheet for the sheetfed printer. We fine-tuned every facet of Flo to create the printer's ideal go-to sheet that offers consistency and versatility.

In fact, Flo is intentionally engineered with specific optical and physical attributes to ensure optimal color reproduction in addition to consistent on-press and post-press performance. The end result? Flo is the reliable all-purpose house sheet that helps to keep your jobs on-time and on-budget.



It starts with a strong foundation

A house is only as good as its foundation. It can be the newest or most beautiful house on the block, but if it doesn't have a solid foundation, the fact is, it won't be around very long. With Flo, we built our house sheet on a strong foundation of paper's fundamental ingredient: fiber.

A vertical wooden plank is the central focus, showing natural wood grain and knots. Four dark, weathered nails are driven into the plank, spaced evenly. The background is a collage of textures: wood shavings on the left and bottom, and a grey concrete block on the right.

Flo is often referred to as a "fiber-intensive" paper, meaning its main ingredient is fiber. And not just any fiber... Flo is built with Northern Hardwood; high-quality short and thin fibers that are ideal for creating smooth, uniform paper. Flo's high fiber content and characteristically high bulk translate directly into print stability and consistent performance on press, in bindery, and in other post-print operations.

Certifications aren't just logos on the back of a printed piece. The best certifications are standardized measurements of sustainable practices that can be used to purchase responsible and sustainable products. All of the fiber used in building Flo is sourced from responsibly managed forests and manufactured with 100% renewable energy.

Going beneath the surface


In home construction, you need sound structures and systems in place to make sure that your project goes according to plan. Investing in these basic frameworks, like plumbing, helps you get the results you want and can influence a number of other decisions along the way. When it comes to printing, the framework is the optical and physical qualities of your paper—qualities that are critical to your project's success.

Paper's contribution to the quality of a print job cannot be overstated. It's all about starting with a superior printing surface—a surface that's engineered with specific optical and physical properties.

The optical and physical characteristics of paper affect the hue of the highlights, contribute to the smoothness of tonal transitions in the quarter to mid-tones, illuminate the three-quarter tones, and determine a significant amount of print contrast and image detail in the shadows. As the reflecting surface for light passing through filters of transparent inks, the physical and optical properties of paper dramatically impact the dynamic range of color rendition. Paper truly is the fifth color in the four color print process and the choice of paper can either maximize or restrict the achievable color gamut of a printing process. Flo is specifically designed to reproduce a full gamut of vibrant color.







Not surprisingly, paper is often referred to as the fifth color of the four-color printing process. Note the effect that paper can have in determining the shade of the highlight-to-quarter-tone range, where paper “white” dominates the printed image.







A bright idea

The network of wires running through the walls of your house has a complex and critical job to do. Without hidden details like these, you'd be left in the dark. The same is true of paper. How your paper is engineered can impact brightness, shade and surface uniformity—all of which affect color reproduction. Flo is engineered to maximize the full gamut of color for unparalleled uptime and press efficiency.

Paper brightness and shade... Both are measurements of how paper reflects light, and both affect color reproduction. As paper reflects available light in the viewing area, it actually becomes the light source for print, so it is critical that the paper reflects both the quantity and full spectrum of available light.

A paper's brightness acts like a light bulb, reflecting the quantity of light that creates contrast and produces vivid color. Brightness, however, cannot be confused with paper whiteness or shade. Brightness is a measure of the light reflected only at one specific wavelength (457 nm) which happens to be in the blue region of the color spectrum, and therefore ignores light reflecting from the green, yellow and red regions.

Unlike brightness, shade is a measurement that gives us insight into the uniformity of light reflected across all wavelengths of the visible spectrum of color. Shade tells us about the color of white, whether it is balanced and neutral, or color-cast. Shade measurements tell the printer whether the paper will likely be able to reproduce a large gamut of color or whether it will restrict the range and accuracy of color reproduction.



In short, a balanced white paper will equally reflect a large portion of the visible spectrum, whereas a blue-white paper will absorb more of the red and green wavelengths and reflect more blue light.

The shade of paper is measured and specified according to the CIELAB color model—the model that closely correlates with our visual perception of color. CIELAB uses the coordinates of $L^*a^*b^*$ to precisely define a specific color in three-dimensional color space. The closer that the a^* and b^* values are to “0,” the more color-neutral (balanced white) the paper.

Flo is designed with an optimal level of brightness while still maintaining a balanced white shade. These elements of design allow Flo to reflect an even, full range of light, therefore maximizing the gamut of printed color. Skin tones appear natural, images of food appear appetizing, corporate colors are accurate, pastels are true, bright images are fully saturated, and general color reproduction is predictable and repeatable. That means fewer stops on press to color-correct images, less downtime and more efficiency in the pressroom. And that makes for happy printers and happy clients!





The proof is in the details

Sometimes the project you painstakingly plan turns out differently than you had imagined. This can be true of home design as well as printing. Flo makes print-to-proof matching easy with consistent performance across a variety of viewing conditions. Whether on the pressroom floor, in a controlled light booth or outside on a sunny day, Flo provides reassurance in color consistency. So what you've seen is what you'll get.

Flo's balanced white shade and low levels of optical brightening agents provide printed color stability in a variety of viewing conditions. Not only is Flo easy to color-manage and generally the best match to many inkjet proof papers, Flo provides printers with the confidence that virtually any color can be reproduced on press with ease. Such consistency, stability and predictability can dramatically increase pressroom efficiencies.



Any experienced designer or press operator can speak of the challenges that arise when trying to match a press sheet to an inkjet proof in various lighting conditions. Why is this so difficult?



The answer is optical brightening agents (OBAs)—chemicals that manufacturers often add to papers to boost brightness. OBAs absorb invisible ultraviolet wavelengths from the illuminant and cause that energy to be re-emitted as perceptible light in the blue area of the visible spectrum; a process called fluorescence. The degree to which a paper fluoresces depends on the amount of optical brightening agent and the amount of UV energy emitted by the light source. The more optical brighteners present in paper and the more ultraviolet (UV) energy emitted by the light source, the bluer the paper appears.

Generally speaking, most papers used for inkjet proofing have a balanced white shade and contain low levels of optical brightening agents, if any at all. The difficulty arises when a press operator attempts to match the color being printed on the press sheet with what's seen on the inkjet proof.

Some proofing and printing papers may be a good match in certain indoor lighting conditions. However, when viewed outdoors or under a D50 illuminant (the reference illuminant for the graphic arts which contains UV energy—simulating natural daylight), what matches in a lighting condition void of UV energy may no longer match when UV energy is introduced. The highlight and quarter-tone areas of a printed image are especially vulnerable to changes in hue when printed on a high-brightness paper and viewed in different lighting conditions.

Craftsmanship, the original artform

In any finished construction project, the craftsmanship of the job is immediately apparent when you see it—both the good and the bad. When it comes to paper, craftsmanship can be seen in the effects that surface uniformity, ink holdout and opacity have on the printed product.

Paper surface uniformity is a major hallmark of paper quality and significantly affects image reproduction. The rougher the surface, the less evenly it accepts ink and the more randomly it scatters light. Smooth, glossy print surfaces reproduce fine detail, maintain low dot gain, provide smooth tonal transitions, optimize print contrast and yield dense solids.

Good ink holdout, another result of superb craftsmanship, is critical for accurate color reproduction, efficient trapping and high levels of retained ink gloss.

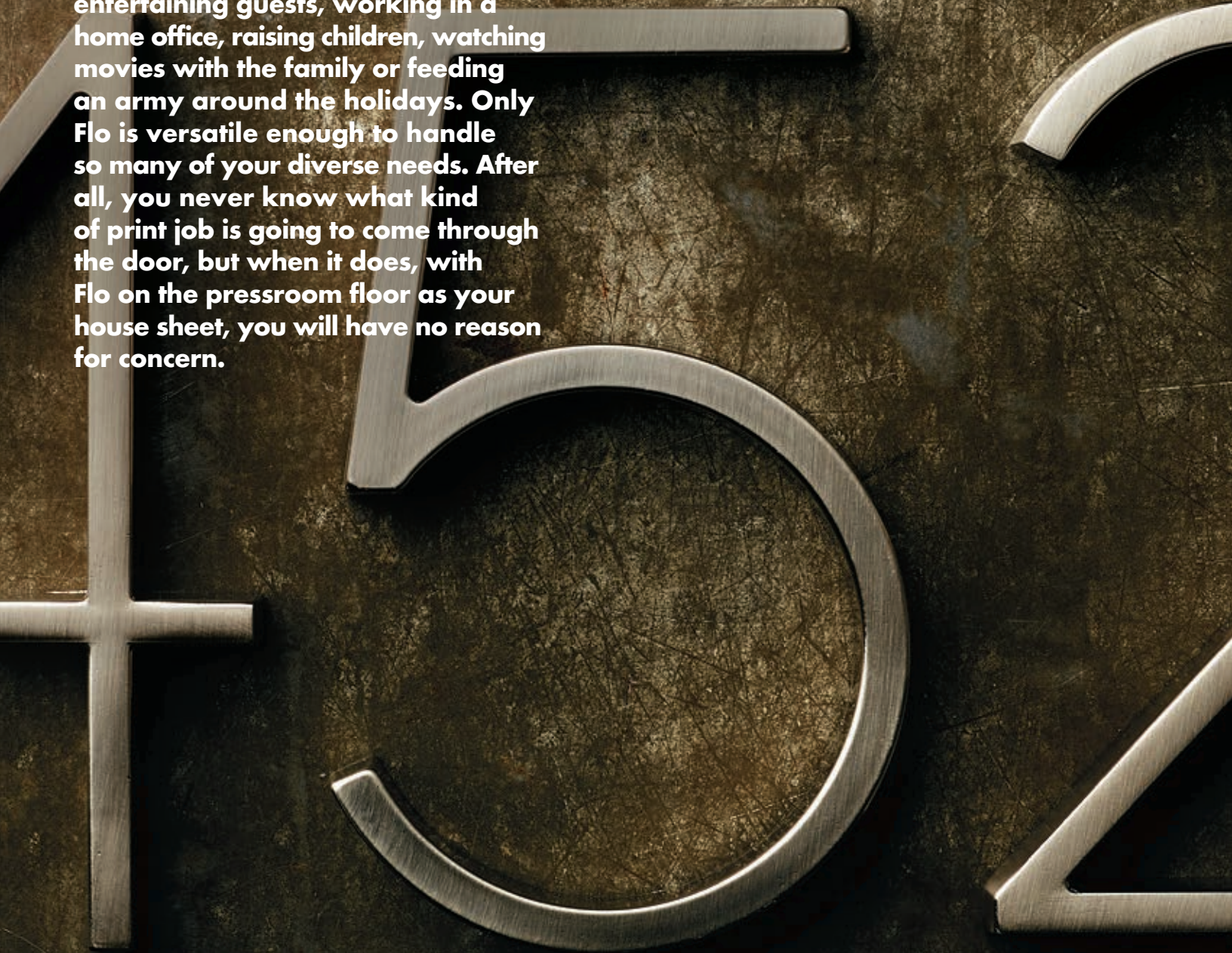
Opacity, our third measure of paper craftsmanship, measures the amount of light that passes through a sheet of paper. Good opacity prevents images printed on the backside of a page from showing through. High opacity also improves readability and reduces potential eyestrain for the reader. We designed Flo to have a high degree of opacity that will minimize side-to-side show-through and enhance the quality and impact of the final printed piece.





The necessity of versatility

Lastly, any great house has to accommodate a wide variety of uses: entertaining guests, working in a home office, raising children, watching movies with the family or feeding an army around the holidays. Only Flo is versatile enough to handle so many of your diverse needs. After all, you never know what kind of print job is going to come through the door, but when it does, with Flo on the pressroom floor as your house sheet, you will have no reason for concern.



Flo is available in a full range of basis weights, sizes and finishes. Each finish offers its own unique characteristics designed for a variety of print projects, all at an economy price. Flo is also available in a digital format as an ideal house sheet for daily turnarounds and personalized digital mailing programs.

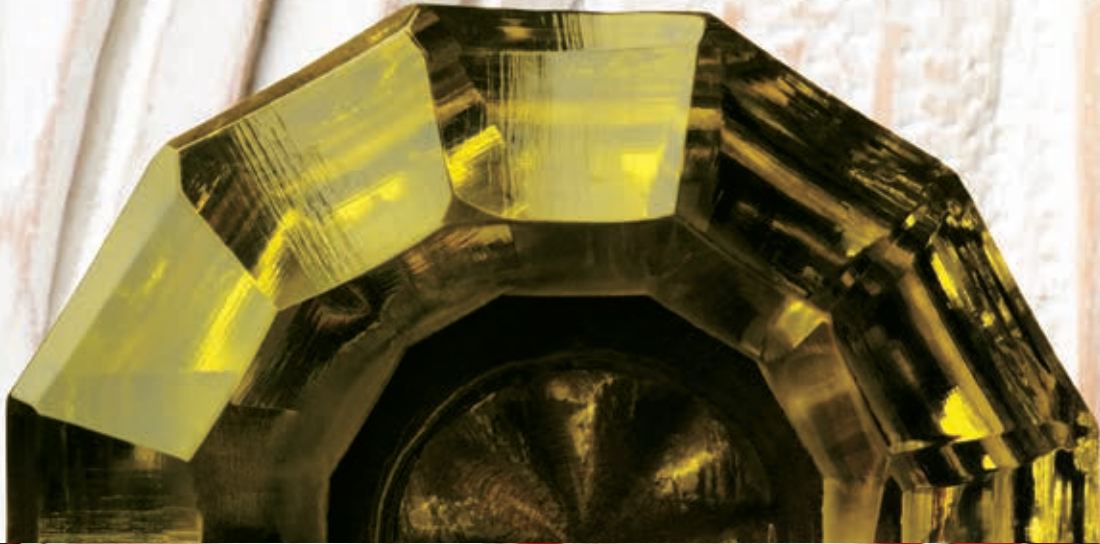


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Flo Matte delivers a unique, soft and tactile surface that engages audiences and delights clients.

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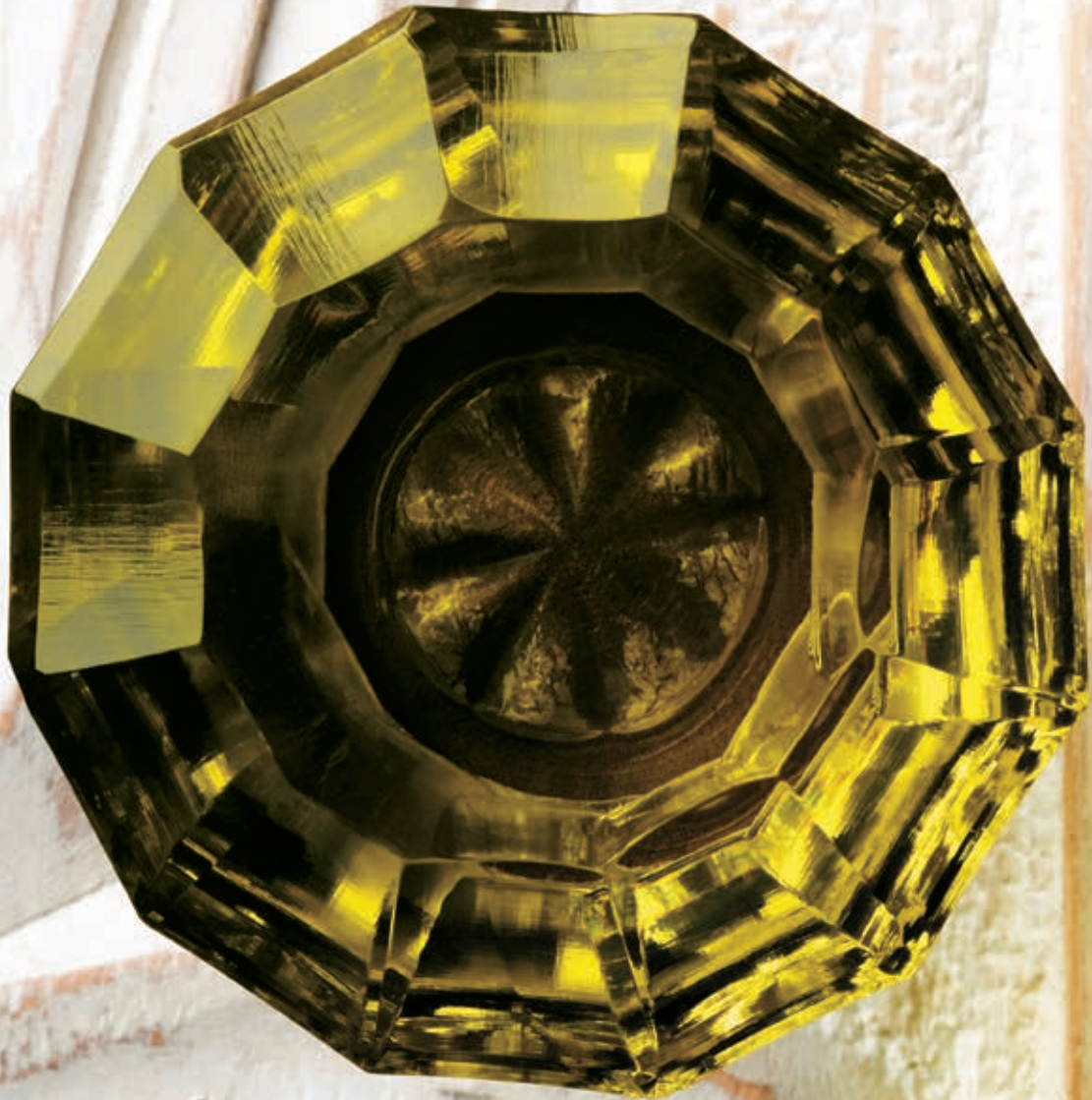
Flo Dull features a proprietary micro-embossed surface that provides print uniformity and surface consistency.

The necessity of versatility

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Flo Gloss offers a uniform, smooth print surface for even light reflection, consistent and accurate dot reproduction, smooth tonal transitions, unmatched detail and maximum print contrast. The end result? Bright, vibrant, glossy images.





A house sheet from the start

A house becomes a home when it meets all your needs. The same goes for a house sheet. Flo was designed, engineered and constructed from the ground up to meet your unique house sheet needs. Only Sappi's Flo offers the high levels of performance, versatility and sustainability you can count on at an economy price. Like a house built for the way you live, Flo is built for the way you work.

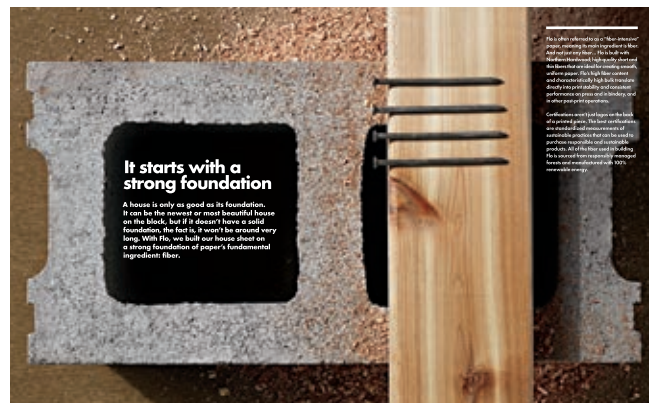


Get Flo on your floor!

Keep Flo on your pressroom floor and be prepared to quickly handle whatever job comes your way. It's the dependable economy paper that stretches your dollar without compromising quality or environmental responsibility. Only Flo offers the reliable on-press performance and color reproduction capability needed to consistently handle your demanding jobs—all at an economy price.

For support with all your paper needs, Sappi offers our own Printer Technical Service team. Have a question? Contact us, and we'll help walk you through it. Sappi also offers CIELAB data and ICC profiles for Flo and our other domestic sheets. A Printer Technical Service representative can be reached at (877) 727-7443.

To request printed samples of Flo, contact your local Sappi sales representative or visit sappi.com/na. For current stocking sizes and availability, and details on current environmental certifications (FSC®, SFI®, or Green-e®), please consult your Sappi sales representative, or call (800) 882-4332.



Going beneath the surface

In home construction, you need sound structures and systems in place to make sure that your project goes according to plan. Investing in these basic frameworks, like plumbing, helps you get the results you want and can influence a number of other decisions along the way. When it comes to printing, the framework is the optical and physical qualities of your paper—and it is critical to your project's success.

Paper's contribution to the quality of a print job cannot be overstated. It's all about meeting the unique printing objectives a surface must be engineered with specific optical and physical properties.

The optical and physical characteristics of paper affect the hue of the highlights, contribute to the contrast and brightness values in the picture to enhance, determine the fine appearance, and determine the degree of color saturation and range of the reproduction. In the end, the color and light passing through fibers of paper create the physical and optical properties of paper. It's the combination of these two that gives your paper the ability to reproduce the broad range of colors available. Paper's ability to hold color is the best color print process and the choice of paper can either expedite or impede the colorable color print of a printing process. It's specifically designed to reproduce a full range of colors.

The necessity of versatility

Lastly, any great house has to accommodate a wide variety of uses: entertaining guests, working in a home office, raising children, watching movies with the family or heading on army around the holidays. Only Flo is versatile enough to handle so many of your diverse needs. After all, you never know what kind of job is going to come through the door. But when it does, with Flo in the pressroom floor on your house sheet, you'll have no reason for concern.

Flo is available in a full range of basis weights, sizes and finishes. Each Flo sheet is constructed with a variety of characteristics designed to meet your needs. Flo is also available in a range of colors, and it's easy to see why. Flo is the only paper that can be used for both commercial and residential printing.

A bright idea

The network of wires running through the walls of your home has a complex and critical job to do. Without hidden details like these, you'd be left in the dark. The same is true of paper. How your paper is engineered can impact brightness, shape and surface uniformity—all of which affect color reproduction. Flo is engineered to maximize the full gamut of color for unparalleled options and press efficiency.

A house sheet from the start

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Paper's inherent white shade and low levels of optical brightening agents provide great color stability in a variety of viewing conditions. But only Flo's unique color management and precision dye technology in every color print process. The result is a print that's consistent and reliable, every time. The result is a print that's consistent and reliable, every time. The result is a print that's consistent and reliable, every time.

Craftsmanship, the original artform

In every finished construction project, the craftsmanship of the job is immediately apparent when you see it—both the good and the bad. When it comes to paper, craftsmanship can be seen in the effects that surface uniformity, the look and feel of the printed product.

Paper surface uniformity is a major hallmark of craftsmanship. The rougher the texture, the more likely the paper will be to show signs of wear. Flo's smooth surface is a testament to its craftsmanship. Flo's smooth surface is a testament to its craftsmanship. Flo's smooth surface is a testament to its craftsmanship.

Good ink behavior, another mark of craftsmanship, is critical to ensuring color reproduction, offsetting and high-level print quality.

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MY LIFE
AIN'T
OVER!
RECYCLE

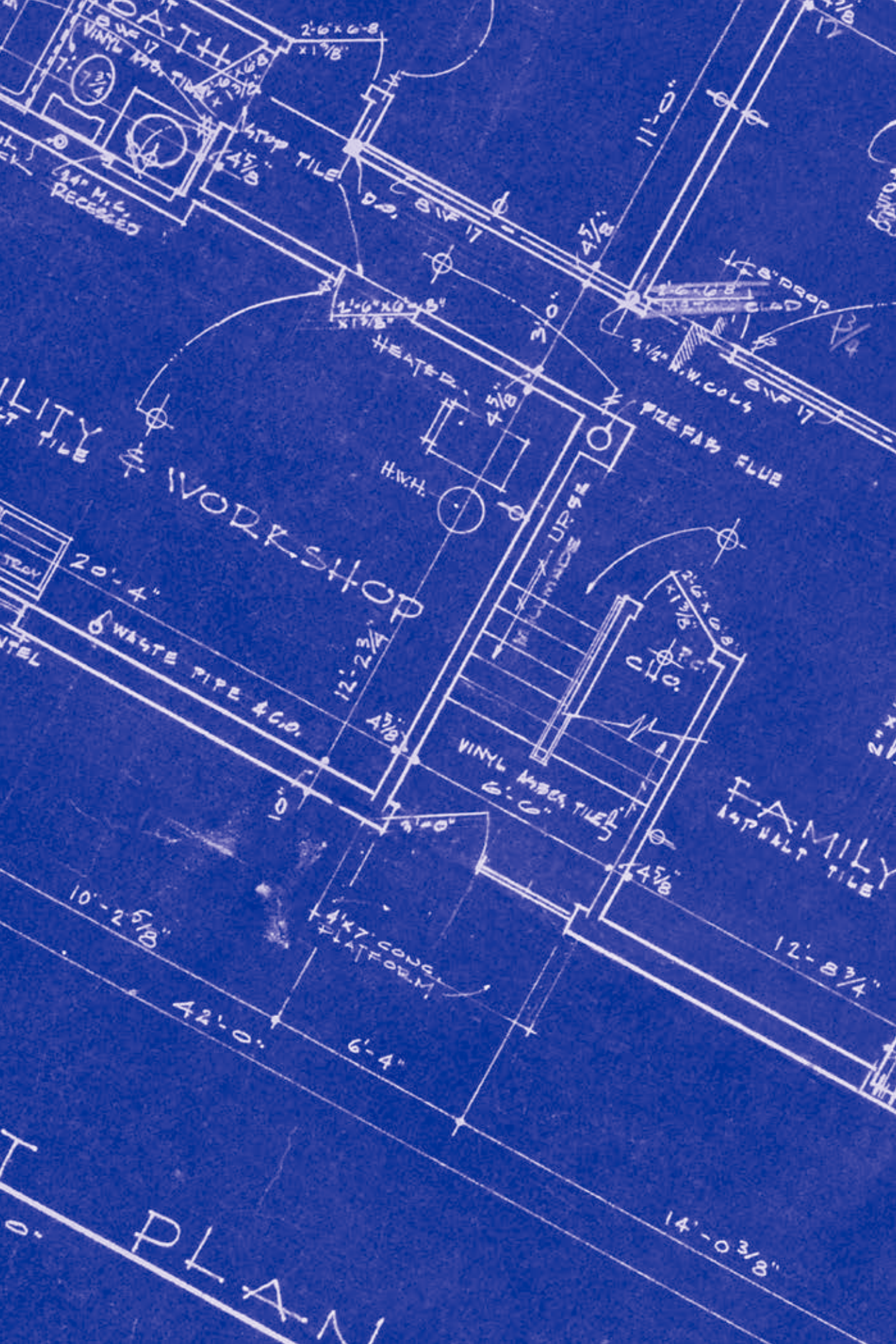


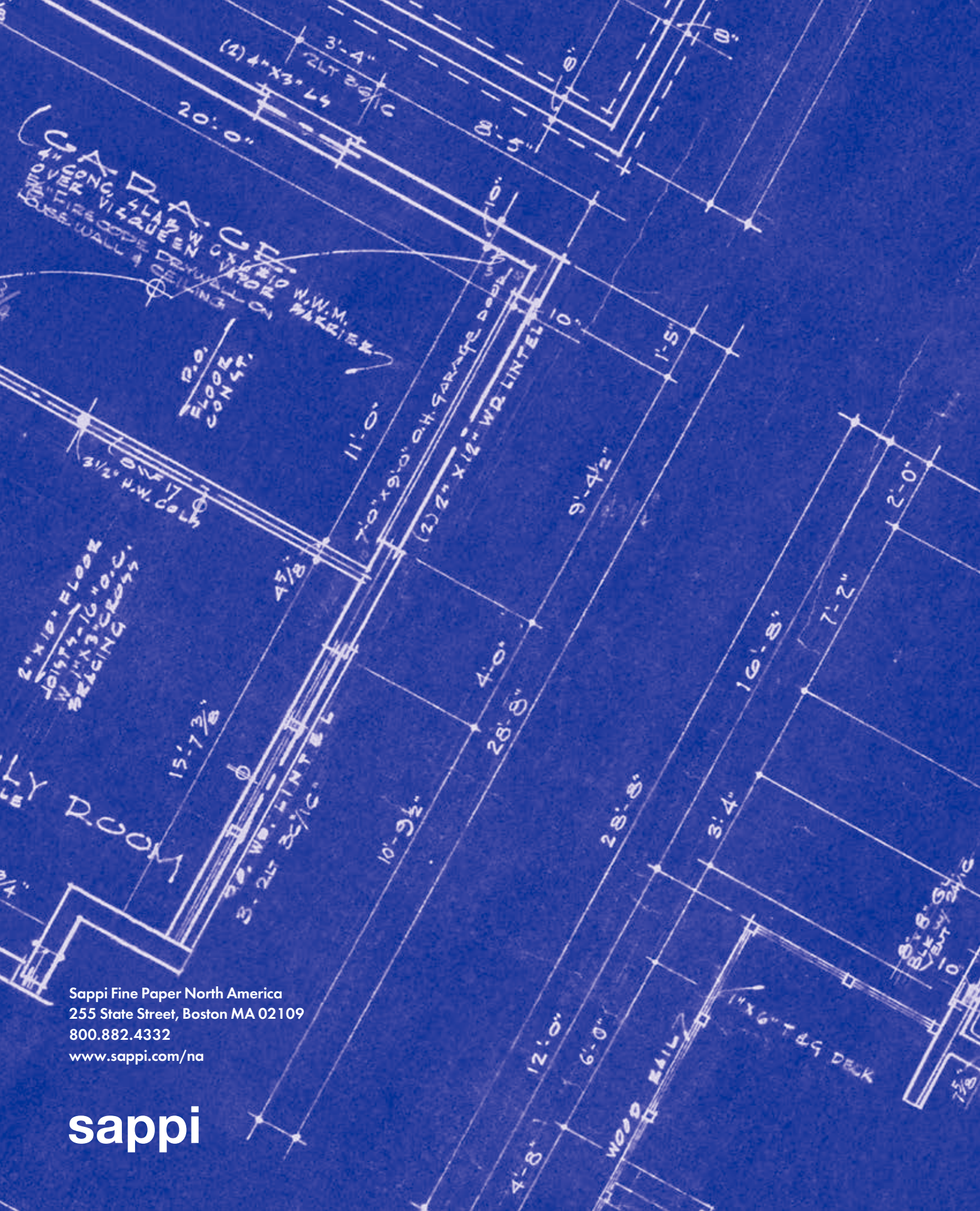


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