

# SURVEY AND RESEARCH REPORT

ON

## The John B. Ross and Company Mill

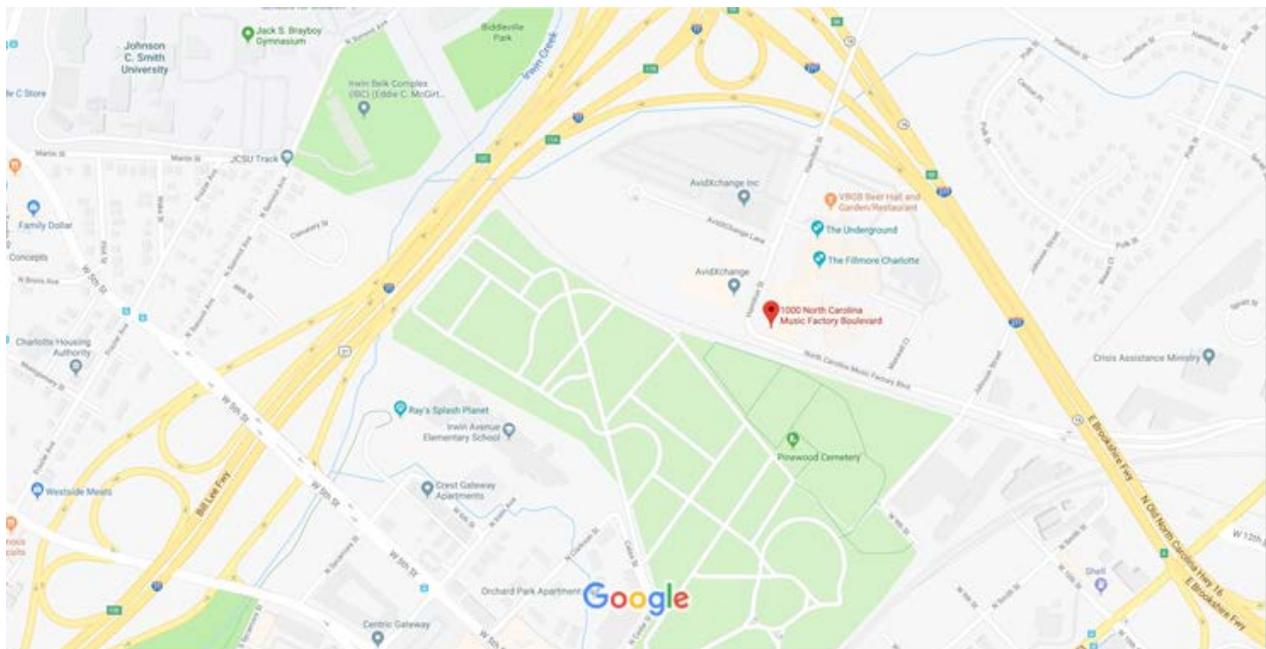
**1. Name and location of the property:** The property known as the John B. Ross and Company Mill is located at 1000 Seaboard Street, Charlotte, Mecklenburg County, NC.

**2. Name and address of the present owner of the property:**

Fiber Mills LLC  
c/o Richard Lazes  
18301 Mandrain Point Drive  
Cornelius, NC 28031

**3. Representative photographs of the property:** This report contains representative photographs of the property.

**4. Maps depicting the location of the property:** This report contains a map depicting the location of the property.



**5. UTM coordinate:** 17S 3899614.0N 514075.5E

**6. Current deed book and tax parcel information for the property:** The Tax Parcel Number is of the property is 078-425-01. The most recent reference to this property is recorded in Mecklenburg Deed Book 12331, page 666.

**7. A brief historical sketch of the property:** This report contains a brief historical sketch of the property.

**8. A brief architectural description of the property:** This report contains a brief architectural description of the property.

**9. Documentation of why and in what ways the property meets criteria for designation set forth in N. C. G. S. 160A-400.5:**

**a. Special significance in terms of its history, architecture, and/or cultural importance:** The property known as the John B. Ross and Company Mill does possess special significance in terms of Charlotte-Mecklenburg. This judgment is based on the following considerations:

- 1) The John B. Ross and Company Mill is significant for its contribution to the industrial strength of Charlotte, NC throughout the first half of the twentieth century.
- 2) As an example of an early twentieth century cotton mill that was easily converted into an asbestos textile mill, the complex is particularly important as the location of the Southern Asbestos Company, a regional leader in terms of production, employee numbers, and numbers of spindles and looms.
- 3) As one of the earliest textile mills in Charlotte, NC that has a high degree of integrity where so many comparable buildings have been significantly altered or entirely demolished.

**b. Integrity of design, setting, workmanship, materials, feeling and/or association:** The John B. Ross and Company Mill has had many additions over the years, but each addition is identifiable, and other than the replacement of windows, each section retains integrity and character pertaining to the construction date.

**10. Ad Valorem tax appraisal:** The Commission is aware that designation would allow the owner to apply for an automatic deferral of 50% of the Ad Valorem taxes on all or any portion of the property which becomes a designated "historic landmark."

The current total tax value of the building and features is \$6,825,200.00. The current tax value of the lot is \$967,400.00. The current total value is \$7,792,600.00.

**11. Portion of property recommended for designation:** The exterior of the building and the property associated with the tax parcel are recommended for historic designation.

**Date of preparation of this report:** June 10, 2011

**Prepared by:** Logan I. Ferguson, Powers & Company, Inc.

## **Historical Overview**

### **Summary Statement of Significance**

The John B. Ross and Company Mill, located at 1000 Seaboard Street in Charlotte, NC, was built in stages from 1904 through the 1950s with minor additions in the 1960's.

The factory began as a mill producing cotton bags and ties, but for most of its history, it was used for the production of asbestos textile products by the Southern Asbestos Manufacturing Company, a major supplier of fireproof cloth products. The John B. Ross and Company Mill is significant for its important contribution to the industrial strength of Charlotte, NC throughout the first half of the twentieth century. As an example of an early twentieth century cotton mill that was easily converted into an asbestos textile mill, the complex is particularly important as the location of the Southern Asbestos Company, a regional leader in terms of production, employee numbers, and numbers of spindles and looms.

### **Contextual Statement: Early Textile Manufacturing Growth in Charlotte, NC**

Although the cotton mill industry in Mecklenburg County dates back to the early nineteenth century, it was not until 1880 that the first successful textile mill was established in Charlotte. R.M. and D.W. Oates built the Charlotte Cotton Mills at that time with seventy workers tending to 6,240 spindles.<sup>[1]</sup>

The railroad lines helped to shape Charlotte's growth as a major textile-manufacturing hub, allowing for the distribution and delivery of raw and finished goods. By 1876 the rail lines that were in place before the Civil War radiated in six directions, stretching north to Richmond, VA, and beyond, south to Atlanta, GA, and both east and west to connect Charlotte to all of the southeastern states.<sup>[2]</sup> Consequently,

Charlotte became the meeting point of the Southern and Seaboard rail systems. Southern Railways was formulated in 1894 and consolidated four of the six rail lines that passed through Charlotte; in 1900, Seaboard Air Line Railroad purchased the remaining two lines.<sup>[3]</sup>

Many cotton mills were constructed in the Charlotte area in the late nineteenth century, including the Alpha Cotton Mill, the Ada Cotton Mill, the Victor Cotton Mill (all in 1888-89), Highland Park Manufacturing Company No. 1 (1891), the Atherton Cotton Mills (1892), the Louise Cotton Mills (1897), and the Magnolia Cotton Mill (1899).<sup>[4]</sup> By 1900, Mecklenburg County had sixteen textile mills with a total of 94,392 spindles and 1,456 looms, which made it the second largest textile-manufacturing county in the State after Gaston County.<sup>[5]</sup>

The rapid growth of the textile manufacturing industry of Charlotte was representative of the New South industrialization that occurred after Reconstruction. In Charlotte, the transition from agriculture to industry was championed by Daniel Augustus Tompkins (1852-1914), a pioneering industrialist and civic booster who played a “pivotal role in transforming Charlotte from a small market town into the leading center of textile production in the United States.”<sup>[6]</sup> Tompkins also founded the D.A. Tompkins Company and between 1884 and 1910, helped build over 100 cotton mills, 250 cotton oil mills, and 150 electric light plants.<sup>[7]</sup>

Mill construction flourished in the Charlotte area during the first two decades of the early twentieth century. By 1902, there were three hundred mills in operation within 100 miles of Charlotte.<sup>[8]</sup> According to Charlotte City Directories, in 1900 Charlotte was home to fifty-seven industrial plants; by 1910 that number was up to 108. The directories do not specify exactly how many of these plants were specifically related to textile production. Many of Charlotte’s historic industrial buildings, like the John B. Ross and Company Mill, were erected in the neighborhood of Uptown Charlotte, as the heavy industry and warehouses relocated away from the city center during this period of unprecedented industrial growth.<sup>[9]</sup> Mecklenburg County’s manufacturing plants continued to multiply during the 1910s. By 1920, Mecklenburg County was home to 127 manufacturers, 111 of which were located in Charlotte.<sup>[10]</sup> Four years later, the number of manufacturing and industrial plants had increased to 200, the majority of which were textile-related. In 1920, the U.S. Census reported that in Mecklenburg County there were 6,242 people involved in general manufacturing with a production value of \$48,496,831.<sup>[11]</sup> In comparison, there were 4,344 people involved in agriculture with a production value of \$7,805,676.<sup>[12]</sup> Such a differential clearly illustrates the shift in significance from agriculture to manufacturing and the increased importance of textile mills throughout the county.<sup>[13]</sup>

## John B. Ross and Company Mill: A Brief Building History

The John B. Ross and Company Mill comprises two associated mill buildings joined by a narrow bridge structure. The complex has been expanded incrementally over the last hundred years, reflecting the growth of the asbestos industry.

In 1904, local manufacturer, developer, and businessman John B. Ross of John B. Ross & Company constructed the first building on the site as a textile mill to produce cotton bags and cotton ties on Seaboard Street in Charlotte.<sup>[14]</sup> This building (extant) was originally known as the Main Mill, and later as Mill #1 of the Southern Asbestos Company Mills complex. As shown on the 1905 Sanborn map, this 1-story brick building was sited at an angle to make use of its own railroad spur off of the Seaboard Air Line Railroad for the delivery of coal.<sup>[15]</sup> Other buildings on the site in 1904 included a small brick office building, two square frame storage sheds, and a freestanding water tower.<sup>[16]</sup>

Throughout the 1910s, the Main Mill (Mill #1) functioned as a cotton textile mill for John B. Ross & Company. In 1911, the complex included a small office and shed along the southern edge of the property abutting Seaboard Street, two tile sheds northwest of the Main Mill, a frame tile-making building at the north end of the property, and a water tank and a small shed directly west of the Main Mill. The 1911 Sanborn map notes the internal layout of the John B. Ross Bag & Tie Factory's Main Mill (Mill #1): carding at the northernmost end, spinning in the middle of the building and weaving at the south end, closest to Seaboard Street. The Main Mill (Mill #1) is the only building of the 1911 complex that is still standing.

Beginning in 1920, Southern Asbestos Manufacturing occupied the John B. Ross & Company complex and manufactured a complete line of asbestos yarns and textiles.<sup>[17]</sup> Soon after the Southern Asbestos Manufacturing Company moved into the complex, new buildings were constructed on the site. The existing warehouses were torn down and two new warehouses known as Warehouses #1 and #2 were built.<sup>[18]</sup> A building permit from 1920 granted to John B. Ross for the Southern Asbestos Manufacturing Company allowed for the construction of a 50' by 60' one-room brick building adjacent to Mill #1.<sup>[19]</sup> This small building was likely Warehouse #2; it was a square building with a gabled roof that stood to the west of Mill #1. Warehouse #1, another 1-story brick building with a gabled roof, was attached to the southern wall of Warehouse #2. Both warehouses first appear on the 1924 drawing of the site from *Drummond's Pictorial Atlas*. The warehouses are extant on the 1953-1959 Sanborn map, but they had been demolished by 2001, when the current owner purchased the property.

By 1924, Southern Asbestos Manufacturing Company had enlarged Mill #1 in three different places: the south end featured a large brick addition, which created an L-shaped footprint, the north end featured two new small brick buildings, and a dust shed and a dust collector were also added to the east elevation. Southern Asbestos Manufacturing Company also constructed Mill #2 (extant) by 1924, a second 1-story brick factory building that stands at an angle to the original mill.<sup>[20]</sup> Mill #2 was constructed to match the style of Mill #1 with segmental arched window openings, a low-pitched gable roof, and wide overhanging cornice with exposed rafter tails. A small bridge section was also built to provide internal access between the two mills.

In early January 1928, the plant was legally conveyed from John B. Ross & Company to Southern Asbestos Manufacturing Company.<sup>[21]</sup> This date corresponds with the year that the Southern Asbestos Manufacturing Company was officially reorganized into the Southern Asbestos Company.<sup>[22]</sup> The following year, in April 1929, the Thermoid Company of Trenton, NJ, purchased a controlling interest in the Southern Asbestos Company, but the firms that occupied the buildings at 100 Seaboard Street continued to operate as the Southern Asbestos Company.<sup>[23]</sup>

According to the Sanborn maps, sometime between 1929 and c.1946, a 1-story storage building was constructed to the north of the dust collector near Mill #1. The building appears on the 1953-1959 Sanborn map, and had been demolished by 2001, when the current owners purchased the property.

During the 1940s and early 1950s, prominent mill architect R. C. Biberstein (1859-1931) was retained by the Southern Asbestos Company to improve the interior of Mill #1 and possibly make additions to the existing plant that corresponds to those 1946 sections noted on Sanborn Maps.<sup>[24]</sup> According to a 1941 drawing by R. C. Biberstein, the 1904 portion of the first floor of Mill #1 was altered to accommodate fourteen carding machines.<sup>[25]</sup> This is in keeping with the 1929 Sanborn map, which described the area as a “Preparation Building” where carding would have taken place as one of the primary stages of textile production. The 1941 drawing also illustrated two new fans: the Buffalo Forge 55 and the American Blower 70. These blowers led directly into the large dust collectors on the east side of the building. Biberstein’s 1951 drawings for the same area in Mill #1 replaced the carding machines with blending feeders on the first floor and also situated blending and cotton pickers in the basement.<sup>[26]</sup>

According to the Sanborn maps, in 1946 Mill #1 also received a modern brick addition off of the east elevation of the c.1920 addition. A large metal shed containing machinery for a dust collector was also added to the east elevation of Mill #1 by c.1955. This addition replaced the dust shed and collector that is visible on the Drummond’s 1924 *Pictorial Atlas of North Carolina*. Sanborn maps show that Mill

#2 was significantly expanded in phases beginning in c.1946 with a large 2-story brick addition off of the north end of the building and various drying and service rooms off the west elevation in c.1955.

During the 1960s, a number of additions were made to the complex by the owner at the time, H.K. Porter and Company Inc., the parent company of Southern Textile Corporation (formerly Southern Asbestos Company). These included the large grade-level addition constructed off of the north elevation of Mill #2. Additionally, the bridge section was enlarged on the south side with the construction of a tall 2-story brick nondescript unfenestrated service area. A small 1-story red brick electrical building, constructed in c.1960 directly north of Mill #1, was demolished in 2005.

Very few changes were made to the buildings during the 1980s and 1990s after Southern Textile Corporation sold the facility in 1983 to Southern Manufacturing Company, Inc., another asbestos textile manufacturer.

Various asbestos textile manufacturing companies utilized the mills at 1000 Seaboard Street until 2001, when the property was sold to Fiber Mills, LLC, a local developer. This same year, the property was recognized by the State of North Carolina as a Brownfields Project. Over the last few years, extensive asbestos decontamination and mitigation was performed on the inside and outside of the John B. Ross and Company Mill to meet environmental requirements. The present owner has begun to rehabilitate the buildings for conversion to art galleries, music recording studios, and other arts and music related uses. The rehabilitation work completed to date includes the addition of a performance stage and awning attached to the section adjacent to the existing bridge; landscaping of the courtyard space between Mills #1 and #2; new aluminum-clad windows; interior improvements to the upper level of Mill #1, such as refinishing floors, removing flaking paint from columns and ceilings, and general cleaning; and installation of contemporary offices into the upper level of Mill #2.

### **John B. Ross and Company Mill: Significance in Industry**

From 1920 to 1957, the John B. Ross and Company Mill, then known as the Southern Asbestos Company Mills, was the largest producer of asbestos textiles, yarn, thread and cord in Mecklenburg County and provided an important source of employment, income and industry to Charlotte and the surrounding area. Locally, the John B. Ross and Company Mill is a significant contributor to the success of Charlotte's textile industry. While the John B. Ross and Company Mill is unique in the area because of the affiliation with the asbestos industry, the inner workings of the plant essentially functioned in the same way and with very similar machinery as other textile mills in Charlotte. Consequently, the label of "textile mill" is entirely appropriate and the John

B. Ross and Company Mill can be evaluated within the context of other Charlotte textile mills, not only other asbestos mills.

### ***Brief History of the Southern Asbestos Company***

The John B. Ross and Company was incorporated in 1903 in Charlotte, NC. John B. Ross was the President, Joseph R. Ross was the Vice President and T.H. Ross was the secretary/treasurer.<sup>[27]</sup> Shortly thereafter, the company began their construction of their plant at Seaboard Street and opened in 1904 with seventy-five employees and ten looms. By 1907, the company had \$35,000 in capital stock and 180 employees. The employees worked eleven hours per day and 306 days per years.<sup>[28]</sup>

The company primarily manufactured cotton bags, which were bags in which cotton was packed for shipping to textile mills. These bags were typically made of jute, which was a stronger fiber and therefore particularly durable for these purposes. A 1905 Sanborn Fire Insurance Map also states that the company manufactured cotton ties, which were used for binding the cotton before it was placed in the bags.

The company ceased operation in 1920, at which time the buildings were occupied by the Southern Asbestos Manufacturing Company. By 1924, the John B. Ross and Company formally sold them the buildings.

### ***Brief History of the Southern Asbestos Company***

The Southern Asbestos Manufacturing Company was organized in 1919 in Charlotte, NC, and Lincolnton, NC, with a capital stock of \$300,000 and the intention of producing asbestos yarn and cloth using mineral deposits in western North Carolina.<sup>[29]</sup> The company was founded by Captain Charles Eben Childs, who served as the first president and treasurer. W.H. Truesdell, a former factory superintendent of the General Asbestos and Rubber Company of Charleston, SC, became the vice president and manager of the company and W.K. Medernach was the first superintendent and secretary.<sup>[30]</sup> These three men remained the management team for nearly a decade.<sup>[31]</sup> In 1920, they began operations in the complex that had originated as the John B. Ross Cotton Bag Factory at 1000 Seaboard Street in Charlotte.

In late January 1928, the Southern Asbestos Manufacturing Company was officially incorporated and renamed Southern Asbestos Company.<sup>[32]</sup> This reorganization was made possible by the increase of the company's profits from \$110,000 in 1926 to \$164,000 in 1927 to \$354,000 in 1928.<sup>[33]</sup> By 1928, W.H. Truesdell had become the president of the firm.<sup>[34]</sup> This was also the year in which the factory was legally conveyed to the Southern Asbestos Manufacturing Company, which occurred prior to the incorporation.

The following year, in April 1929, the Thermoid Company of Trenton, NJ, purchased a controlling interest in the Southern Asbestos Company.<sup>[35]</sup> With this purchase, the Thermoid Company, one of the largest manufacturers of brake linings for automobiles and industrial machinery in the United States became the “second largest earning [asbestos] property in the country.”<sup>[36]</sup> The Southern Asbestos Company was acquired to supply asbestos products internally to Thermoid Company, which required a steady supply of asbestos yarn and cloth in the manufacture of its break linings and other products.<sup>[37]</sup> *The New York Times* reported in 1929 that the Southern Asbestos plant was “thoroughly modern and its location in Charlotte, NC, insures an adequate supply of low cost labor.”<sup>[38]</sup> The Thermoid Company also manufactured such items as clutch rings, rubber belting and hose, universal joint discs, and asbestos packing. By 1935, the Thermoid Company also owned the Thermoid Textile Company and the Woven Steel Hose and Rubber Company and had operations throughout the United States and Canada. Thermoid’s chief clients included the Ford Motor Company, the General Electric Company and the Westinghouse Electric & Manufacturing Company.<sup>[39]</sup>

In December 1, 1941, the Thermoid Company purchased all of the remaining manufacturing assets of the Southern Asbestos Company (which included the plant at 1000 Seaboard Street), and renamed their Charlotte operations “Thermoid Company – Southern Division.”<sup>[40]</sup> Southern Asbestos Company maintained its corporate identity within Thermoid and continued to produce the woven asbestos yarn, cord and asbestos cloth under the “Flameguard” trade name at the facility.<sup>[41]</sup>

In November 1958, the Thermoid Company merged with the H.K. Porter Company, Inc. of Pittsburgh, PA. As a result, Southern Asbestos Company came under the umbrella of the H.K. Porter Company, Inc. and was renamed the Southern Textile Company.<sup>[42]</sup> Through the 1960s and 1970s, the Southern Textile Company manufactured various types of asbestos products that were used in shipyards and in the shipbuilding industry across the country and around the world.

When H.K. Porter Company, Inc. filed for bankruptcy in August 1982, the Southern Textile Company (formerly Southern Asbestos Company) officially went out of business and the company was sold. The facility at 1000 Seaboard Street continued to be used by a succession of manufacturers to produce asbestos textiles for a variety of textile companies until 2000 when operations ceased and the building was sold to a local developer.<sup>[43]</sup>

### ***Asbestos: A Brief History***

The discovery of the uses of asbestos, a naturally occurring mineral, is at least 5,000 years old, dating back to the ancient civilizations in Greece and elsewhere in the Mediterranean area. The name asbestos is derived from the Greek

language: *a-* meaning “not” and *sbestos*, meaning “extinguishable.” It was discovered by these civilizations that asbestos could be mined, crushed, separated, and bundled into fibers that could be woven like cloth to produce a textile that was resistant to heat.<sup>[44]</sup> Of the three types of asbestos that were mined – anthophyllite, amphibole, and serpentine – only one variety of serpentine was particularly good for manufacturing textiles because of its great flexibility and strength.

The modern asbestos industry began in early nineteenth century in Italy with the production of fabrics, tablecloths and napkins, clothing, book covers, and building materials.<sup>[45]</sup> By the mid-nineteenth century, asbestos was used for insulation of machinery, pipes and engines.

In 1861 asbestos deposits were discovered in the United States.<sup>[46]</sup> The first large-scale production of asbestos in the eastern U.S began in 1894 at the Sall Mountain area of Georgia.<sup>[47]</sup> Continuing through the end of the twentieth century, asbestos in the eastern United States was commercially mined in Georgia, North Carolina, Virginia, Maryland, Connecticut, and Massachusetts. Of these states, North Carolina had the most commercial asbestos mines, with 27 mines concentrated largely in the southwestern corner of the state.<sup>[48]</sup> The competitors were Georgia, with 17 mines; Pennsylvania: 4; Maryland: 4; Vermont: 3; Massachusetts: 2; Virginia: 2; and Connecticut: 1.<sup>[49]</sup>

The fire retardant and insulating qualities of asbestos caused it to be incorporated into many new products. In 1906, the first asbestos brake linings were manufactured in the United States.<sup>[50]</sup> From the 1920s through the 1950s, the construction of warships, automobiles, homes and buildings utilized asbestos products, including insulation materials, floor and ceiling tiles, siding, and cement pipes. Asbestos yarns, wires, and cords, such as those produced at the John B. Ross and Company Mill, were primarily used in the electrical industry because they were extremely durable and could withstand unusually high temperatures.

In the 1920s for the first time, a prevalence of severe lung disorders and deaths among asbestos workers was linked with the exposure to asbestos dust for the first time. Two distinct diseases were diagnosed in association with breathing in asbestos fibers: asbestosis, a term for the scarring of the lungs by embedded asbestos fibers; and mesothelioma, a cancer of the lung and chest wall. The first documentation of a case of asbestosis occurred in a medical journal of 1924. In the 1930s, when the public health service came to do surveys in North Carolina, they were sternly admonished to “not stir up any kind of damage suits by telling the workers that they were examining how dangerous asbestos was.”<sup>[51]</sup> Although the risks of asbestos were evident as early as the 1920 and 1930s, it was not until the 1960s and 1970s that such concerns could no longer be ignored. Warning labels were not typically put on asbestos products by

manufacturers until the 1960s, after the mortality studies were published in the *Journal of the American Medical Association* in 1964. Within months of those studies, some of the companies started to put mild warning labels on their cartons of insulation products.<sup>[52]</sup> With the creation of the Occupational Safety and Health Administration (OSHA) in 1971, standards for the production of asbestos materials were first applied to the industry. Regulation of asbestos manufacturing and use continues today.

These increased health concerns instigated the worldwide decline in asbestos production and consumption by thirty-one percent from 1980 to 2000.<sup>[53]</sup> Simultaneously, the number of asbestos litigations and lawsuits increased. Between 1980 and 2002, over 500,000 individuals in the United States filed over ten million claims related to asbestos exposure. Consequently, over seventy-five firms were forced to file for bankruptcy, with over \$275 billion in damages.<sup>[54]</sup>

Although the asbestos materials production is no longer a major industry in the United States and the last United States asbestos mine closed in California in 2002, asbestos still remains a concern. Certain asbestos products, such as brake linings, are still used on a limited basis, and as of 1997 nearly 50,000 people in the United States die from asbestos exposure each year.<sup>[55]</sup> In other countries, however, asbestos is still mined and manufactured.

### ***The Process of Manufacturing Asbestos Textile Products***

Below is a brief description of the manufacturing process of asbestos textile products that occurred in the John B. Ross and Company Mill, then known as the Southern Asbestos Company Mills.

Raw asbestos was initially received by the textile factory in its crudest form. Upon arrival, the asbestos was inspected for quality and the crude asbestos fiber was then partially opened by a pan crusher or chaser mill, which passed the fibers beneath giant steel or stone wheels. Picking machines then separated these partially crushed fibers from impurities and other residual debris. All of the fibers of different types and grades were then combined to achieve a greater uniformity.<sup>[56]</sup>

These combined fibers were then often mixed with organic fibers, such as cotton or rayon, which acted as carriers or supporting agents to improve spinning properties and increase serviceability. One product of the mixing process was non-woven felt, which was produced when the fibers were matted, condensed, and pressed in either random or parallel orientation. Special binders were sometimes added to increase the strength and alter the texture of the product.<sup>[57]</sup>

After the mixing process, the next step was the carding process, which finished the cleaning and opening of the asbestos fibers. The carding machine arranged the fibers into a relatively parallel arrangement, which was called a sliver. The sliver became “roving” – the principle product of the process – when it was “separated into ribbons, rubbed mechanically and condensed into untwisted strands.”<sup>[58]</sup> The other three possible products of the carding process were raw carded fibers, non-woven felt, as mentioned above, and lap, which was a continuous, compressed sheet that was rolled under pressure into a cylindrical package.<sup>[59]</sup>

The roving was then twisted or spun. Twisting occurred literally when the asbestos roving was twisted to increase tensile strength and facilitate further processing; this twisted roving was called “wick”, which can then either be twisted to produce twisted rope or braided to produce braided rope. If the roving was spun, it became a single asbestos yarn. This yarn was then: braided into braided rope, cord or tubing; twisted with light wires or metallic yarns to produce plied yarns; twisted with itself to produce twisted cord; coated with gums, starches, waxes, or resins; or woven on a loom into asbestos tape or cloth.<sup>[60]</sup> The Southern Asbestos Company made a wide variety of asbestos textiles and yarn products, as illustrated in a company-published catalogue entitled “Asbestos Textile Products” dating to c.1950.<sup>[61]</sup> The Southern Asbestos Company catalogue offered thirteen primary asbestos textiles to its customers: carded asbestos fiber, combed asbestos fiber, asbestos roving, asbestos yarn, asbestos cord, asbestos thread, asbestos wick, asbestos rope, asbestos wire wiping cord and wick, asbestos cloth, asbestos dust bags, asbestos tape, oil burner asbestos wicking, and asbestos braided and woven tubing.

## **Architectural Description**

The John B. Ross and Company Mill, standing at 1000 Seaboard Street at the northwest corner of Seaboard and Hamilton Streets, is located in the Uptown Charlotte neighborhood of Charlotte, NC, in an industrial district. The John B. Ross and Company Mill was constructed in phases primarily between 1904 and 1959, with minor additions in c.1960. This manufacturing plant is positioned near the Seaboard Airline Railroad, which runs parallel to Seaboard Street.

The John B. Ross and Company Mill consists of two red brick buildings (Mills #1 and #2) that are joined by a bridge section (Photographs 1 and 10). The oldest portions of the plant, dating to the early twentieth century, have low-pitched gabled roofs; the newer portions, which date to the mid-twentieth century, have flat roofs. The brick throughout the entire building is laid in American bond. The sills throughout the plant are brick, as are the lintels of many of the windows. Mills #1 and #2 are positioned in

an inverted V-shaped configuration, surrounding a newly paved courtyard. This courtyard faces south onto Seaboard Street and contains parking spaces, a driveway and a recently installed decorative fountain; the west side of the property aligns with Hamilton Avenue (Photograph 1). To the north of Mill #1 and the east of Mill #2 is a large open amphitheater that was constructed in c. 2010 in conjunction with the rehabilitation of the mill complex (Photograph 7). The surrounding areas to the east and west of the mills contained asphalt parking lots and limited landscaping.

### ***Mill #1***

Mill #1 is 1-story above grade and has a partially exposed basement (Photographs 8-12). The original portion was built in 1904 and in c. 1920 there were three additions: an L-shaped section was added to the south and east, a smaller L-shaped section to the north and east with a later rectangular piece to its north. In c.1946, a rectangular wing was added to the east elevation of the southern c.1920 addition and a smaller rectangular section was added to the north of the northern c.1920 addition. By c.1955, four more sections, which served as the dust collectors, had been added to the east of the center section of the 1904 building. In c.1960, another very small wing was added onto the north of the southern c.1946 addition. Except as noted, all of the early 20<sup>th</sup> century openings are segmental arches with a lintel and two courses of headers.

The courtyard elevation or west elevation of Mill #1 mostly dates to 1904, except for the north and south ends, which were added in the 1920s and 1940s. The west elevation is divided into two sections, which are north and south of the Bridge Section. The portion south of the Bridge Sections consists of thirteen bays: eleven window openings, one entrance opening in the fourth bay from the south and one entrance opening in the fifth bay from the south (Photographs 10-12). The segmental arched window openings contain new rectangular replacement 1/1 double-hung aluminum-clad windows. The fourth bay from the south contains a single-leaf glazed wood door that dates to c. 2010 and the fifth bay from the south contains a double-leaf flush metal door with four narrow lights and a 1-light arched transom. A new contemporary flat steel canopy was added in 2006. The canopy has been painted and is suspended from steel cables, but has no other detailing or ornamentation. The four southernmost bays, added in the 1920s, are placed on a section of the elevation at an angle towards the southwest. The entire west elevation is sheltered by a continuous overhanging wood eave with wide wood rafter tails. A raised platform of concrete and decorative concrete pavers with a pipe railing extends along the west elevation of Mill #1. Additionally, signage has been added in the form of banners and metal signs that have been attached using stanchions to the mortar joints between the bricks.

The section north of the Bridge Section on the west elevation of Mill #1 was added in three stages in the 1920s and 1940s (Photograph 8). Between 1925 and 1929, a 2-

story, L-shaped addition was added onto the north elevation of the 1904 portion of Mill #1. The west elevation of this 1904 section is no longer visible as it is the connection point for the Bridge Section, but the south elevation is marked by a flat brick parapet. In this same period from 1925 to 1929, a 1-story square wing was added into the space between the legs of the "L". The west elevation of this second addition was flush with the west elevation of the first addition, but its north elevation was recessed. Only the west elevation of this addition, which also dates to between 1925 and 1929, remains visible and it is marked by a contemporary metal canopy above a narrow entrance opening and a garage-style entrance opening. Neither opening retains its doorway. Directly north of the second addition is a 2-story section, which was built in c.1946. Its west elevation was flush with those of the two prior additions and its north elevation was flush with that of the first addition. The west elevation of this c.1946 addition is one bay wide with a flush single-leaf steel door on the first floor and a window opening on the second floor that has been infilled with brick. The elevation also features a flat brick parapet, which raises the wall height to that of the first addition.

The south elevation of Mill #1 was constructed in two phases (Photograph 9). The western half of the south elevation of Mill #1 dates to c.1920; the remainder of the elevation was added in c.1946. The ground level slopes down towards the southeast, allowing for an exposed basement level at the eastern half. Original window openings that have since been infilled with brick are visible on both levels. The elevation has eleven contemporary 1/1 aluminum windows in new openings that date to c. 2010 and are arranged at regular intervals. At the west end of the lower level is a contemporary, single-leaf aluminum door and at the west end of the upper level is a contemporary, single-leaf glazed wood door, both of which date to c. 2010. A short, flat parapet capped with a strip of contemporary aluminum provides a finishing cap to the south elevation.

The east elevation of Mill #1 consists of three additions to the original building. To the north is an addition that extends north from the main block and dates to c.1920; two more additions extending from the middle of the elevation date to c.1946 and c.1955, the latter being a 2-story dust collector room of red brick. The northern section of the east elevation contains a series of segmental arched window openings on the first and second stories that, for the most part, are infilled with brick. One opening contains a metal louvered vent and another appears to be filled with plywood. The roofline has the same overhanging eave with the same wide wood rafter tails as the rest of the east elevation of Mill #1.

The middle section of the east elevation of Mill #1 (belonging to a 2-story dust collector room addition that dates to c.1955) is red brick. Two metal dust collector

towers, from the same period, project from this section of Mill #1 and infill the area between the c.1955 dust collector room addition and the original Mill #1. The two towers are taller than the surrounding building and range between two and three stories. Both towers have gabled metal roofs with overhanging eaves.

The southernmost section of the east elevation of Mill #1, which dates to c.1946, is 1-story in height on a raised basement. This portion of the elevation is six bays wide on the first floor; the rectangular openings are filled with new clad 1/1 double-hung windows. Several additional window openings on the first floor are filled with brick, indicating alterations over the years; the entire basement level consists of infilled window openings. The roofline has an overhanging eave with wide wood rafter tails, similar to the cornice on the west elevation of Mill #1. A 1-story brick projection dating to c.1960 is situated at the corner between the c.1946 addition and the c.1955 2-story dust collector addition immediately to the north. This projection contains a single-leaf flush steel entrance door with a corrugated metal hood on its south elevation.

The north elevation of Mill #1 consists of the c.1955 dust collector room addition and c.1920 and c.1946 additions to the north elevation of the 1904 portion of Mill #1 (Photograph 8). The dust collector room is brick with one single-leaf flush steel opening on the second floor at the east end. The brick on the second floor appears to have been applied at a later date. A 1-story addition, also dating to c.1955, abuts the north elevation of the dust collector room and is five bays wide. Four of the five bays are filled with 2-light awning style windows. The westernmost bay has a double-leaf entrance. Visible on the north elevation at the base of the metal towers is a 1-story brick addition. This section contains a wide entrance opening with a sliding metal door. Another small addition to the west, also dating to c.1955, contains two double-leaf entrances with flush steel doors. The north elevation of the c. 1920s addition is three bays wide with a flush double-leaf steel door in its easternmost bay. The c. 1946 addition is also three bays wide and all openings have a segmental arched brick head. There is a flush single-leaf steel door in its easternmost bay on the 1<sup>st</sup> floor and a 1/1 aluminum window in the westernmost bay on the 1<sup>st</sup> floor that dates to c. 2010. The remaining bays have been infilled with brick. The roofline has a similar overhanging eave and wide wood rafter tails as that of the rest of the east elevation of Mill #1.

The interior of Mill #1 has two levels (Photographs 24-27). The 1904 section along the most of the western side of the building consists of two levels and has brick walls, a wood floor and a peaked wood ceiling and a single row of square wood posts running the length of the space. A heavy metal fire door leads from the northwest corner of this space to the bridge. Under the current ownership, the upper level has received some recent improvements, including refinished wood floors and the

removal of flaking paint from the beamed ceilings and wood columns. In addition, along the interior of the west wall, asbestos stucco was removed from the brick. The upper level of Mill #1 in the c. 1920 portion at the southeast end of the building is at grade level along Seaboard Street. It is a primarily open restaurant space, with wood floors and ceilings, narrow wooden columns spaced evenly on a grid and exposed brick walls. Some of the horizontal and vertical wooden members have been reinforced with steel members. The c.1955 dust collector room on the upper level is an open space with concrete floors, block walls, a peaked, wood ceiling and evenly spaced wood columns on a grid. Also on the interior of Mill #1, new plumbing and electrical wiring were recently installed throughout. The lower level, originally storage and basement space for Mill #1, is predominantly an open space with a non-original concrete floor, exposed brick walls, wood ceilings and narrow wooden columns spaced evenly on a grid.

### ***Bridge Section***

The bridge section dates to c.1920, with an addition to the south of the bridge that post-dates 1959, based on Sanborn maps (Photographs 12). At the north elevation, the bridge is two stories in height, with two wide openings on the 1<sup>st</sup> floor to allow for access under the bridge. The upper portion of the bridge is clad in sheet metal and is utilitarian in character. The interior of the bridge contains a wood floor and metal panel walls.

South of the bridge is a 2-story section dating to c.1960 that is brick and metal panel construction on the north elevation and entirely brick on the south elevation. The south elevation has been recently modified by the current owner with a metal stage with a steel frame roof that is supported by steel columns. A flight of concrete steps leads to the stage at the southeast corner. Behind the stage, the interior of this 2-story section is a newly rehabilitated space with wood floors, exposed brick walls and hard dropped ceilings (Photograph 28).

### ***Mill #2***

The original south section of Mill #2 resembles Mill #1 in style and materials but dates to c.1920. The east elevation facing the new courtyard is 1-story in height and has a series of regularly spaced segmental arched window openings recently filled with square-headed 1/1 aluminum-clad double-hung windows (Photographs 1 and 2). The roofline has an overhanging eave with wide wood rafter tails, similar to the cornice on the east elevation of Mill #1. Above the cornice is a contemporary metal awning that dates to c. 2010. A new entrance installed c. 2006 is located at the tenth bay from the south end. This entrance opening contains a double-leaf contemporary steel door with a steel-framed hood. A raised platform of concrete and decorative concrete pavers with a pipe railing extends along the length of Mill #2 at the south

end. Additionally, signage has been added in the form of banners attached using stanchions inserted into the mortar joints between the bricks. New metal awnings have been added to the entrance areas.

The south elevation of Mill #2 consists of a brick wall with no extant openings. The eastern half displays a few infilled rectangular openings and appears to date from the 1980s when the widening of Seaboard Street entailed removal of a shallow wedge of the south end of the 1920s section. The western half, with a simple stepped parapet, is a combination of two build dates: a small wedged portion at the east end of this half that dates from the c. 1920 original construction and corresponds to an infilled segmental arched window opening; the remaining five infilled openings have square heads and mark the south end of the c. 1946 addition. The irregularly stepped roofline indicates the changes to the building over time.

The west elevation of Mill #2 is 1-story in height with a raised basement (Photographs 3-6). From south to north, the site gradually declines so that ground level on the north end is a full floor height above ground level at the south end. The southern end of Mill #2 consists of the original c.1920 building with several mid-twentieth century additions. All of the windows are recently installed aluminum-clad double-hung windows. Nearly all of the original upper level window openings remain exposed. In the center of the lower level, there are three exposed windows that have been boarded over and one double-leaf flush metal door. At the southernmost end of the west elevation is a square 1-story projection built c.1946 that contains two entrance openings: a garage door opening with a metal pull-down garage door and a single-leaf flush steel door. Just to the north is a small 1-story addition with a shed roof that also dates to c.1946 and has a double-leaf opening with no doorway and a second double-leaf opening filled with a flush steel door. In the middle of the west elevation of Mill #2 is a 1-story projection with a flat roof that dates to c.1955. This projection is largely unfenestrated. To the north of this is another c.1955 addition, which has three garage-style doors. The northern door contains a double-leaf flush metal door, while the others are filled with metal pull-down doors. North of this addition is a third c.1955 addition, which contains a double-leaf flush metal door beneath a metal canopy. Neither the remainder of this addition, nor the c.1960 addition to the west, both of which are at basement level, has any openings. The west elevation of the large c.1960 addition at the north end of Mill #2, which is also at basement level, has a single-leaf metal door with a glazed panel in its southern bay, a garage-style pull-down door in its center bay and a single-leaf flush metal door in its northern bay. An awning extends over all three bays.

The north end of Mill #2's c.1920 building is only visible at the 2<sup>nd</sup> floor, as there is a 1-story addition, dating to c.1946, attached in this area. The 2<sup>nd</sup> floor contains a series

of window openings filled with the same windows as the rest of Mill #2. The 1<sup>st</sup> floor consists of the 1-story shed-roofed addition with three entrance openings: a double-leaf flush metal door at the top of a flight of concrete steps; and two raised loading bays with roll-down metal doors. The addition also features a long monitor roof, which runs the length of the addition and is barely visible from the exterior. The monitor roof has bands of 1-light windows that run the length of the east and west sides, but there are no windows at either the north or south ends.

North of the original c.1920 portion of Mill #2, the west elevation continues with a large brick 1-story addition, c.1946, with a raised basement. This addition is fifteen bays wide from north to south. The window openings are filled with industrial style 8-light steel windows. There is one entrance opening approximately in the middle of this portion of the west elevation: a pair of double-leaf steel doors with a 4-light transom overhead. Above the door is a metal sign that reads "The Fillmore" and dates to c. 2010. A concrete ramp leads up to the entrance.

At the very north end of the west elevation of Mill #2, there is a 1-story c.1960 addition, which measures approximately 125' x 160'. This addition has a flat roof and is lacking in ornamental architectural features. A loading dock with two single-leaf flush steel doors and a roll-down metal door are located at the extreme northern end of this addition's west elevation.

The north elevation of Mill #2 consists of three building periods due to the slope of the site: a 2-story section that dates to c. 1920; a 2-story section to the north that dates to c.1946; and an additional lower floor extension constructed in c. 1960 which consists of an red brick wall with no openings (Photograph 5). The c.1946 section has twelve bays, which are all filled with a series of industrial 8-light steel windows. The 2-story c.1920 building is nine bays wide; each bay contains a new 1/1 double-hung wood-clad window. The 2-story building, visible only at the second floor level, retains a stepped red brick parapet.

The east elevation of Mill #2 consists of several areas dating to different construction periods. The northernmost section is the large 1-story addition built in c.1960, which has two double-leaf flush entrance doors and an opening filled with a large metal vent. A 2-story metal tower projects from the middle of this section. Adjacent to this section is the 1-story section on a raised basement, dating to c.1946. Both levels contain a series of the same industrial style 8-light steel windows as the west elevation. The east elevation of Mill #2 at the c.1920 section resembles the west elevation with its series of segmental arched window openings filled with replacement 1/1 aluminum-clad windows. The roofline is accented with an overhanging eave and wide wood rafter tails.

The interior of Mill #2 is divided into lower, middle and upper levels; the uppermost level is at grade along Seaboard Street while the lower level is beneath grade at the north end of the building (Photographs 13-23). The upper level of Mill #2, dating to c.1920, only extends along the south half of the footprint. The open spaces feature wood floors and wood ceilings and exposed brick walls in their original condition. This level has been successfully renovated by the present owner into new contemporary loft style offices with a central corridor to access the units. These offices expose and highlight the tall ceilings, and wooden beams, columns and floors. Typical finishes include refinished wood floors, exposed brick walls, wood columns and beamed ceilings. New plumbing and electrical wiring was installed throughout Mill #2 by the present owner as part of the renovations. The middle level of Mill #2 (split into two areas: the north half constructed in c.1946 and the south half dating to c.1920) is an entirely open space with concrete floors, brick walls, wood ceilings and parallel rows of wood and metal columns running the length of the spaces. The south half, the basement level of the original c.1920 portion of Mill #2, was modified over the years with the addition of the concrete floor and metal columns but the original wood-beamed ceiling remains intact. The north half, which dates to c.1946, features a notable monitor roof with glazed east and west elevations that allows maximum light into the otherwise cavernous space. The lower level, which dates to c.1946 and c.1960, has been renovated by the current owners as a theater venue and is an open space with wood floors, painted drywall and contemporary industrial finishes.

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<sup>[1]</sup> Dr. Dan L. Morrill, “A Survey of Cotton Mills in Charlotte and Mecklenburg County for the Charlotte-Mecklenburg Historic Landmarks Commission” (July 1997). Accessed on the World Wide Web on March 27, 2007, [www.cmhpf.org/surveytextilesurvey.htm](http://www.cmhpf.org/surveytextilesurvey.htm).

<sup>[2]</sup> Mary Kratt and Mary Manning Boyer, *Remembering Charlotte: Postcards from a New South City, 1905-1950* (Chapel Hill, NC University of North Carolina Press, 2000), [http://uncpress.unc.edu/chapters/kratt\\_remembering.html](http://uncpress.unc.edu/chapters/kratt_remembering.html) (December 20, 2006).

<sup>[3]</sup> Sarah A. Woodard and Sherry Joines Wyatt, *Industry, Transportation, and Education: The New South Development of Charlotte and Mecklenburg County* (Charlotte-Mecklenburg Historic Landmarks Commission,

2001), <http://www.cmhpf.org/surveyindustrialsurvey.htm> (accessed on January 2, 2007).

[4] Dr. Dan L. Morrill, “A Survey of Cotton Mills in Charlotte and Mecklenburg County for the Charlotte-Mecklenburg Historic Landmarks Commission” (July 1997). Accessed on the World Wide Web on March 27, 2007, [www.cmhpf.org/surveytextilesurvey.htm](http://www.cmhpf.org/surveytextilesurvey.htm).

[5] Dan L. Morrill, *Mecklenburg Mill* (Charlotte-Mecklenburg Historic Landmarks Commission, 1986), <http://www.cmhpf.org/surveys&rmeckmill.htm> (accessed on March 27, 2007).

[6] Frances P. Alexander, *Survey and Research Report on the D.A. Tompkins Company Machine Shop* (Charlotte-Mecklenburg Historic Landmarks Commission, 2001), viewed on the World Wide Web on March 27, 2007, <http://www.cmhpf.org/surveys&rdatompkins.htm>.

[7] William S. Powell, ed., *Dictionary of North Carolina Biography, Volume 6, T-Z* (Chapel Hill, NC: The University of North Carolina Press, 1996), 42.

[8] Woodard and Wyatt.

[9] *Industrial Buildings in Charlotte's Uptown*, (Charlotte-Mecklenburg Historic Landmarks Commission, no date), <http://www.cmhpf.org/uptownsurveyindustrial.htm> (accessed on January 2, 2007). .

[10] Thompson, 165.

[11] Thompson, 131.

[12] Thompson, 131.

[13] In 1926, Mecklenburg County had the 3<sup>rd</sup> most spindles after Gaston and Cabarrus Counties. Thompson, 136.

[14] John B. Ross lived in Uptown Charlotte and was involved in several industrial developments and local worker housing, many of which have been demolished. Ross led the family company, which was incorporated in 1903. Ross was also the vice-president of the Merchants & Farmers National Bank in Charlotte. This information was provided by Dr. Thomas Hanchett, staff historian of the Levine Museum of the

New South, Charlotte, NC via email on December 22, 2006; *Walsh's Charlotte City Directory: 1905-1906*, Museum of the New South, Charlotte, NC.

<sup>[15]</sup> Sanborn Map of Charlotte, 1905. Located in the Carolina Room at the Public Library of Charlotte and Mecklenburg County.

<sup>[16]</sup> One year later, in 1905, John B. Ross constructed a brick warehouse for his bag manufacturing factory (extant) a few blocks away from Mill #1 at 701 Seaboard Street near the corner of Seaboard and Johnson Streets. This brick building, known as the John B. Ross Warehouse, was identified in a survey of industrial properties as being eligible for the National Register by Woodward and Wyatt.

<sup>[17]</sup> Charlotte Mecklenburg Register of Deeds, bk. 332, 169. Although the land was not purchased outright until 1924, the Southern Asbestos Manufacturing Company had had a presence on the property since January 1920. This was evidenced by the notation of the Southern Asbestos Manufacturing Company in a building permit granted to John B. Ross in 1920.

<sup>[18]</sup> Albert Y. Drummond, *Drummond's Pictorial Atlas of North Carolina* (Charlotte, NC: Albert Y. Drummond, 1925), 40-41.

<sup>[19]</sup> Building permit issued January 20, 1920. This building, nearly square in size, is visible between Mill #1 and Mill #2 on the 1924 illustration of the Southern Asbestos Manufacturing Company in Drummond's *Pictorial Atlas of Charlotte* and also appears as Warehouse No. 2 in the 1929 Sanborn Map and continues to stand through the late 1950s, although altered in appearance.

<sup>[20]</sup> Drummond, 40-41.

<sup>[21]</sup> Charlotte Mecklenburg Register of Deeds, bk. 686, 301.

<sup>[22]</sup> *Asbestos* (December 1927), 48; "Southern Asbestos Company." *New York Times*, December 12, 1927: 37.

<sup>[23]</sup> *Thermoid Company Annual Report* (1929), University of Alabama Bruno Business Library files. The Thermoid Company was founded in March 1929 as a holding company to acquire the Thermoid Rubber Company, founded in 1897, and the Stokes Asbestos Company, founded in 1920. *Asbestos* (March 1929), 6.

<sup>[24]</sup> *Biberstein, Bowles, Meacham & Reed Company Records, 1895-1960* University of North Carolina at Charlotte Manuscript Collection, 148, <http://library.uncc.edu/display/?dept=special&format=open&page=657>(accessed

on March 27, 2007). After Biberstein's death in 1931, the firm was taken over by his son, Herman V. Biberstein (1893-1966) and still exists today under the name Biberstein, Bowles, Meacham and Reed. Dr. Dan L. Morrill, *R.C. Biberstein House* (Charlotte-Mecklenburg Historic Properties Commission, July, 5, 1985), <http://www.cmhpf.org/surveys&rbiberstein.htm> (accessed on March 27, 2007).

<sup>[25]</sup> Carding is a process completes the opening and cleaning of fibers. Under the teasing action of thousands of needle-pointed wires which form the working face of the "clothing" that covers the cylinders of the carding machine, the fibers are combed into a relatively parallel arrangement, forming a tenuous web. This web, or sliver as it is called, becomes roving when separated into ribbons, rubbed mechanically and condensed into untwisted strands. Jesse M. Weaver, *Asbestos Textiles and Textile Products* (Manheim, PA: Raybestos-Manhattan, Textile Division, c.1949): 25-26.

<sup>[26]</sup> Blending is the process of combining different types or grades of asbestos fibers to produce a desired effect. Small percentages of organic fibers, such as cotton or rayon, might also be added at this point to improve the spinning properties of the material. A feeder is the first step of the blending process, in which the raw materials are separated and weighed. A picker then takes the raw materials and begins to open and loosen them up. The presence of the cotton picker is notable because it demonstrates that cotton was consistently introduced into the asbestos textiles. Weaver, 25-26.

<sup>[27]</sup> *Charlotte City Directory* (1907), no page. John B. Ross was also the Director and later Vice President of the Merchants and Farmers National Bank Company. He lived at 502 N. College Street (demolished) with his wife, Mary.

<sup>[28]</sup> North Carolina Department of Labor and Printing. *Twenty-First Annual Report* (Raleigh, N.C.:

<sup>[29]</sup> *Asbestos* (July 1919), 3. While the Southern Asbestos Manufacturing Company's primary plant was E.M. Uzzell & Co., 1908): 134-135. located in Charlotte, the company also owned land in Lincolnton, NC. This was partly because Lincolnton was a primary manufacturing center of North Carolina and partly because one of the Company's founders, Captain Charles Eben Childs, lived in Lincolnton.

<sup>[30]</sup> *Asbestos* (July 1919), 3. In 1920, the General Asbestos and Rubber Company was the largest manufacturer of asbestos textiles in the world. The company was founded in 1895. *Asbestos* (July 1920), 5; Charlotte Mecklenburg Register of Deeds, bk. 686, 301.

<sup>[31]</sup> Thompson, 151.

<sup>[32]</sup> *Asbestos* (December 1927), 48; Charlotte Mecklenburg Register of Deeds, bk. 686, 301; “Southern Asbestos Company.”

<sup>[33]</sup> *Asbestos* (April 1928), 46; *Asbestos* (October 1928), 47; *Asbestos* (March 1929), 51.

<sup>[34]</sup> *Charlotte City Directory* (1929), no page. Clarence H. Carlough was the vice president and Walter K. Medernach was the secretary and treasurer

<sup>[35]</sup> *Thermoid Company Annual Report* (1929), University of Alabama Bruno Business Library files. The Thermoid Company was founded in March 1929 as a holding company to acquire the Thermoid Rubber Company, founded in 1897, and the Stokes Asbestos Company, founded in 1920. *Asbestos* (March 1929), 6.

<sup>[36]</sup> *Asbestos* (April 1929), 58; *Asbestos* (March 1929), 6; “Southern Asbestos Company”. “Buys Southern Asbestos.” *New York Times* (March 20, 1929): 43; “Thermoid Company.” *New York Times* (March 22, 1929): 40.

<sup>[37]</sup> “Buys Southern Asbestos.”

<sup>[38]</sup> “Thermoid Company.”

<sup>[39]</sup> “Thermoid Company.”

<sup>[40]</sup> Although the Thermoid Company originally purchased only 51 percent of the Southern Asbestos Company in 1929, it had acquired 96 percent of the stock by 1933. *Asbestos* (September 1929), 55; *Asbestos* (April 1933), 34; Charlotte Mecklenburg Register of Deeds, bk. 1061, 97.

<sup>[41]</sup> By this time, the president is listed as George S. Fabel or Trenton, NJ and Charlotte, NC. Russell H. Temple of Trenton, NJ was vice president Cecile R. Trembath of Charlotte, NC was the secretary and Robert P. Major was the treasurer and superintendent. *Charlotte City Directory* (1941), no page.

<sup>[42]</sup> In 1958, the H.K. Porter Company, Inc. operated forty-nine plants in the United States, Canada and Mexico and manufactured industrial rubber products, forged steel fittings and electrical devices.

<sup>[43]</sup> Letter from the American Academy of Actuaries to Senator Bill Frist, March 24, 2004, [http://www.actuary.org/pdf/casualty/asbestos\\_032404.pdf](http://www.actuary.org/pdf/casualty/asbestos_032404.pdf) (accessed on January 23, 2007).

[44] Bradley Van Gosen, *Reported Asbestos Mines, Historic Asbestos Prospects, and Natural Asbestos Occurrences in the Eastern United States* (USGS, U.S. Dept. of the Interior, U.S. Geologic Survey, 2006), <http://pubs.usgs.gov/of/2005/1189/pdf/Plate.pdf>(accessed on January 10, 2007).

[45] Robert L. Virta, *Mineral Commodity Profiles—Asbestos* (USGS Circular 1255-KK, 2005), [http://pubs.usgs.gov/circ/2005/1255/kk/Circ\\_1255KK.pdf](http://pubs.usgs.gov/circ/2005/1255/kk/Circ_1255KK.pdf) (accessed on January 29, 2007).

[46] *Asbestos* (September 1927), 8. In 1879, asbestos was first commercially mined in North America in Thetford, in the Quebec province. Before the Canadian mine opened, asbestos mines were located all over the world, including throughout Europe and in South Africa, former Soviet Union, Australia and China. Significant asbestos deposits can be found in the United States, Canada, South Africa and the former Soviet Union.

[47] Gosen.

[48] Gosen.

[49] Gosen.

[50] *Mesthelioma, All about Malignant Mesthelioma*, <http://www.allaboutmalignantmesothelioma.com/asbestos-2-history.htm> (accessed on December 11, 2006).

[51] Barry Castleman, “History of the Deadly Dust,” *Multinational Monitor* (September 2000) <http://www.allbusiness.com/specialty-businesses/641307-6.html> (accessed on December 11, 2006).

[52] Castleman.

[53] Robert L. Virta, *Worldwide Asbestos Supply and Consumption Trends from 1900 to 2000*. U.S. Department of the Interior, U.S. Geological Survey, n.d.

[54] Michelle J. White, *Why the Asbestos Genie Won't Stay in the Bankruptcy Bottle* (February 2002). <http://weber.ucd.edu/~miwhite>

[55] Gareth Morgan, *Images of Organization* (Thousand Oaks, CA: Sage Publications, Inc., 1997), 317.

<sup>[56]</sup> Weaver, 25-26.

<sup>[57]</sup> Weaver, 25-26.

<sup>[58]</sup> Weaver, 25-26.

<sup>[59]</sup> Celanese Acetate, LLC, *Complete Textile Glossary* (New York: Celanese Acetate, 2001). [http://209.85.165.104/search?q=cache:47IwEHugcYkJ:www.celaneseacetate.com/print/textile\\_glossary\\_filament\\_acetate.pdf+%22lap%22+definition+%22textile+product%22&hl=en&ct=clnk&cd=4&gl=us](http://209.85.165.104/search?q=cache:47IwEHugcYkJ:www.celaneseacetate.com/print/textile_glossary_filament_acetate.pdf+%22lap%22+definition+%22textile+product%22&hl=en&ct=clnk&cd=4&gl=us) (accessed on March 27, 2007).

<sup>[60]</sup> Weaver, 27-28.

<sup>[61]</sup> Southern Asbestos Company, *Asbestos Textile Products* (Charlotte, NC: Southern Asbestos Company, no date).