

SPECIFICS

FRANCISCO CHAPTER

MARCH MEETING PROGRAM

Wednesday - March 12, 1969

Assembly - Cocktail Hour 6:00 P.M. Dinner & Program 7:00 P.M.

PLACE

"Iron Horse" Restaurant - 2nd floor Banquet Room, 19 Maiden Lane, San Francisco. Off Kearny Street between Geary and Post Streets. Ample street parking is available.

DINNER

Steak - \$5.50 per person, including tax and gratuity. Excellent food. No-Host bar is available on 2nd floor.

PROGRAM

"BUILDING SYSTEMS" Panel discussion will feature two leading designers in this field. Peter Kastl of Building Systems Development, Inc., and a leading architect with long experience in the utilization of the system. (We don't have confirmation on this man, as we go to press) Alan G. Shelmerdine our Technical Committee Chairman will preside and act as moderator for this meeting. Those who attended the CSI convention in Denver will recall the excellent presentation made by Peter Kastl on this vital subject. Don't miss it! More details on page 3.

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NEXT MONTH-

BUILDING PRODUCTS FAIR...

APRIL 16th

Western Marchandise Mart, Fern Court, 10th and Market Streets, San Francisco. 4:30 to 9:30 P.M.

FICERS

Phones: 781-1401 President: Grant A. Larsen

First Vice President:

Douglas W. Day 775-7300

Second Vice President:

David F. Maurier 982-9770

Secretary: Charles F. Wills 861-7400

Treasurer: Tait Smith 467-9700

Advisor: Oniel E. Long 282-8220

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Alan Shelmerdine



Technical:

SAN FRANCISCO CHAPTER 254 SUTTER ST. . 6th FLOOR SAN FRANCISCO, CALIFORNIA 94108

982-9770

PRESIDENT'S MESSAGE

I've just returned from the Regional Presidents' Conference in Los Angeles and can report that the Region and the Institute are in healthy growing state with general optimism prevailing.

However, there is some trouble in our Region of which we should be cognizant. The Reno chapter has died, and two other chapters are in serious trouble from lack of activity by their members. Our chapter is large enough and strong enough to carry on...or is it? The average attendance at meetings is about 60, not many more than 50 are members. With a total membership of over 200 this means we are getting only about 25% of our members out to meetings...some have not attended once during the past year.

We plan to contact all members soon by phone to encourage attendance, and to get suggestions as to what we can do to stimulate activity. SCI should be more than just a social club or mailing source for literature...it should involve all members actively. The chapter doesn't belong to just a few dedicated officers, but to all; and during the next year we would like to enable all members to participate in one phase or another of CSI activity.

The Products Fair is coming up next month, and we hope all will attend and bring their fellow professionals who are involved in specs.

The Regional conference will be held in San Francisco next September and John Kruse will need a lot of help if we are to be hosts in the true "San Francisco" tradition. Volunteers are invitied or will be solicited. I hope you can all help in one phase or another.

As a further report on the Presidents' Conference I can report happily that the CSI tradition of controversy is still alive. It was not just a dull report session, but a lively exchance of ideas. Our Regional and Sectional directors were given varied instructions on how the Far West feels about Institute activities and responsibilities to its members.

.... Grant A. Larsen, President

PERSONALITY

PROFILE . . . by Gilbert H. Johnston

"TAIT SMITH"

Our personality of the month is Tait Smith. If you don't recognize the name you haven't been to a meeting for quite a while because Tait is on his second term as our Chapter Treasurer.

Born April 30, 1909, the son of a mining engineer in New Denver, British Columbia, Tait soon moved on to San Francisco and later graduated from Polytechnic High School. He then attended Polytechnical College of Engineering in Oakland, and did his graduate work at U. C. (Berkeley) and Stanford. While still in school he worked with his father in mining and did topographical surveying for the Southern Pacific. After school, Tait went to work for W. C. Hauck Steel Company and became Chief Engineer. During the depression the steel

company closed, so Tait used his early mining and surveying experience to work on Boulder Dam for the Bechtel Corporation. When the dam was completed he went to work for Crown-Zellerbach Corporation, ending up in the chemistry department in their Washington plant.

When the building industry started up again, Tait returned to San Francisco and the steel business with Truscon Steel Company, and in 1941 he was employed by Ceco Steel Products Co. (now the Ceco Corporation).

An old back injury kept Tait out of the Navy during the war, so he did the next best thing by helping design ships with the firm of Joslin-Ryan Naval Architects. After the war he returned to Ceco and has been with them for 27 years as Architectural and Engineering Consultant.

Aside from being our Treasurer, Tait serves as Civil Service Commissioner for the City of San Carlos, a member of the Structural Engineers Assn. and Masonic Lodge 690.

His hobbies are golf and fishing for trophy-size sailfish. His biggest project for the past few years has been to teach his seven grandchildren how to swim, in his own pool. The unusual feature about this activity is - he starts them out when they are only 6 month old. He explains, at this age they only swim underwater, and you must be right there to occasionally push them to the surface for air.

... Gilbert H. Johnston

BUILDING INDUSTRY CONFERENCE BOARD

The San Francisco Chapter, CSI is a member of the Building Industry Conference Board, so all CSI members are invited to BICB meetings held on the third Wednesday of each month for lunch, 12:00, at the Engineers!! Club on the top floor of the Hong Kong Bank building, 160 Sansome St., San Francisco. For reservations: Phone Earle Beattie of the AGC, 981-8500 (S.F.).

BICB programs are topical and usually very interesting. The March 19 meeting will feature a report by the Western Regional Director of the U. S. Department of Housing and Urban Development, Robert B. Pitts.

Also, they are scheduling a field visit to the rebuilt Bay model in Sausalito as an extra event. The exact date and time to be announced later.

.... Grant A. Larsen

"BUILDING SYSTEMS" - (Continued)

The ultimate goal is better building performance - hence, lower cost over a long period of time, & more building for each dollar spent, in terms of initial cost and maintenance.

This concept requires active participation at each step by manufacturers, labor unions, trade organizations, contractors, and architects/engineers representing participating clients. The Mar, 12th program promises to be one of the most interesting we have offered, and merits your attendance and participation. Two major trends are quite apparent in the near future - Building Systems utilization and the growth of automation in preparation of specifications and drawings.

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PROGRAM-FOR THIS MONTH'S MEETING...

"BUILDING SYSTEMS"

This is the concept that will be explored at our March 12 meeting at the "Iron Horse" in San Francisco. The featured participants are: Peter Kastl, Building Systems Analyst with the San Francisco firm of Building Systems Development, Inc.; Alan Shelmerdine, Rex Whitaker Allen & Associates; plus an Architect who has successfully employed the system in construction. We regret this man has not been confirmed as we go to press. Peter Kastl delivered an excellent presentation on this subject at our CSI Convention in Denver last May. A digest of his talk was printed in the August (1968) issue of The SPECIFIER on pages 77-78. We suggest you review this article.

The building systems concept is being developed to put together a package which makes it possible at the initial bid stage to look at financial cost, economic service life, maintenance cost, and even scrap value of a project. In other words...specific performance. Manufacturers of products and systems in the building industry are being asked to research integrated performance on a cooperative basis in much the same way the automobile industry has developed and tested components, with assurance that the firms who are successful will participate in a piece of the work at hand.

Because the research is being done on a large scale in behalf of many clients - school districts, HUD, municipal housing projects, etc., the scope of economic return is promising for those firms that contribute solutions. (...continued on the preceeding page...)

Technical Committee Report: by Alan G. Shelmerdine, Chairman

Copies of the following Preliminary Technical Study are available from your Chapter Technical Committee Chairman for review and comment. The deadline for comments on this study is April 28, 1969.

No. 02612c - "Specifying Paving: Bituminous"

The reporting deadline for the following studies closed on Jan. 13, 1969:

No. 05202c "Specifying Steel Joists: Standard" No. 0040.3.1c "Supplementary Conditions"

Members willing and interested in participation in the current study are urged to contact me for a copy.

... Alan G. Shelmerdine, Technical Chairman Phone: 982-9770 (S.F.) for information

Welcome to New Members,(007)

Professional Member:

Gilbert L. Oliver, AIA - Architect 346-5212 (B) 2152 Union Street, San Francisco, Calif. 94123

Industry Member:

Virgil R. Morton 967-7796 (B) Granco Steel Products Company 1499 Bayshore Highway, Burlingame, Calif. 94010

CHANGE IN MAILING ADDRESS: Professional Mbr.

Harold Stelling 386-7610 (B)
Cabinet & Fixture Manufacturers Guild 673-3850 (R)
* 52 West Clay Park, San Francisco, Calif. 94121

HIGHLIGHTS of our last MEETING

JOINT MEETING - SF-SJ-MB Chapters & AHC

On Feb. 12 (Mr. Lincoln's Birthday) seventy-plus members and guests from San Jose, Monterey Bay and San Francisco CSI Chapters joined with the Northern Calif. Chapter, American Hardware Consultants for a fine program at Hillsdale Inn, San Mateo. The fellowship hour prior to dinner was very welcome, as it provided an opportunity for "chitchat" with other chapter's members whom we rarely get a chance to see. Too bad more of our members from Marin and the East Bay area were not able to attend.

Chapter Presidents Chuck Rasmussen (SJ), Grant Larsen (SF), Chuck Griffen (AHC), and Vice President Pat Crowley (Mont. Bay) delivered greetings on behalf of their respective chapters and introduced officers, board members and committee chairmen, and guests; followed by self-introductions by other members.

Meeting program chairman was William H. Camp, AIA, CSI, who serves as Code Committee Chairman for the S.F. Chapter. Bill Camp and Program Chairman Don Auker came up with an excellent show.

"Fire Detection Equipment" was effectively handled by Dennis S. Murphy of Pyrotronics Inc., manufacturers of "Pyr-A-Larm" early warning and smoke detection systems. Mr. Murphy told his story very effectively and made liberal use of an elaborate demonstration board which displayed representative types of the components and systems under simulated conditions. Color slides gave visual emphasis to the talk and demonstration by showing via pictures, charts, diagrams and graphs the utilization of various systems in different types of structures.

In simple terms - four systems are available. They can be obtained in a variety of combinations. The essence of fire detection efficiency is to provide a system that will give warning in time to take preventative or corrective action before the fire develops to the point where it will cause heavy damage or loss of life. Minutes and seconds count. Fires move through four stages - if not checked - and frequently at a very rapid pace. 1) Incipient Stage when no smoke, flame or heat has been generated (such as electrical or mechanical overloads). If not detected this stage can move swiftly into advanced stages. Ionization detectors are used because they respond to invisible combusion products.

2) Smoldering Stage is reached when smoke is generated but flame not visible. Photo-electric detectors respond to to visible smoke. 3) Flame Stage occurs after the point of ignition has been reached. Once this stage has been reached it moves rapidly. Infra-red detectors are used to pinpoint this situation. 4) Heat Stage is the final step producing flame, heat and smoke. At this stage about all that can be done is to detect, fight the fire and try to contain it to prevent heavy damage and/or loss of life. Thermal detectors are used in this situation.

Each of these units were demonstrated and color slides employed to outline systems suitable for various types of buildings and environments. Various types of detectors are combined into a complete system comprising control panels, warning lights, alarm bells or signals, trouble signals, etc. Fire zones are set up within a building or complex for rapid identification when trouble occurs. Alarm signals beyond the treatened structure to a remote station, fire department, guard service or a control station to assure prompt corrective action.

The systems can be used to activate fire extinguishing equipment, sprinklers, release smoke doors, start/stop mechanical or electrical devices. (Continued on next page...)



Any questions on rock, sand, gravel, cement, concrete?

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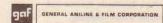
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HIGHLIGHTS of our last MEETING

The systems can quickly pinpoint the exact source of trouble in large structures; and the better systems are self-activating after power failures & can be equipped with an independent power supply, if desired. Each system should be tailored to deal with possible hazzard areas within a structure, such as: boiler & equipment rooms, storage, working/living spaces, etc. Systems come in a wide variety of combinations and the cost depends on the degree of sophistication required.

Mr. Murphy distributed an illustrated brochure of value to specifiers to develop a better working knowledge of the equipment and its use. He will be pleased to send one to interested specifiers, upon request. Write or contact: Dennis S. Murphy, c/o Pyrotronics Inc., 970 Nob Hill Road, Redwood City, Calif. 94061; or phone: 415, 369-5710. It was a fine show and worth seeing. Our thanks to Dennis Murphy, Bill Camp, Don Auker and Chuck Griffen for arranging the show. Chuck Griffen assisted Mr. Murphy in fielding questions from the floor at the end of the formal presentation.

A POCKET FULL of NOTES. . .

CLARK ELLSWORTH

Former chapter president R. Clark Ellsworth has terminated employment with Pregnoff & Matheu, consulting structural engineers covering a span of 12 years - to join the staff of Spencer, Lee & Busse (Architects) working out of their Palo Alto office. This move has solved the commuting problem for Clark who lives in Menlo Park.

While the paycheck may come from a new source, Clark is not a stranger to his new firm because. he has worked with the staff for several years in connection with his assignment at Pregnoff & Matheu which served as engineering consultants in association with SL&B on many projects. Our very best wishes go with Clark on his new assignment. Perhaps because of the long and close association between the two firms, neither are losing in the new relationship. We envy Clark because reduction in the strain of freeway driving will allay one frustration that besets many of us these days. There is no change in Clark's mailing address (residence). Other data:

R. Clark Ellsworth 321-3221 (B) 854-4065 (R) Spencer, Lee & Busse - Architects 405 Town & Country Village, Palo Alto, Calif. * 241 Dedalera Drive, Menlo Park, Calif. 94025

COMING EVENTS: San Francisco Chapter

- Mar. 12 Board Meeting, AIA Office, 254 Sutter St., (6th Floor) S. F. 4:30 P.M.
- Mar. 12 Chapter Meeting, "Iron Horse", (2nd Floor) 19 Maiden Lane, S.F. 6-9:30 PM Mar. 28 - Copy deadline, April issue "Specifics"
- Apr. 16 Building Products Fair, Western Merchandise Mart, 9th & Market Sts., San Francisco. 4:30 - 9:30 P.M. Note: time & place of Board Meeting to be announced in next issue.

POSITION TO OPEN

A position will be open for an experienced Specifications Writer and Estimator to head a department. This is a permanent position with a fine opportunity to qualify as an associate in a leading firm. An excellent opportunity for the right person. For information, please contact:

Mr. O. C. Malmquist, Jr. 362-7812 (B) Kitchen & Hunt, AIA - Architects 20 Hawthorne Street San Francisco, California 94105

EDITORIAL

Our editorial this month is reprinted from the Detroit Chapter, CSI newsletter "DeCSIpher" for January 1969. It was written by O. Robert Bellucci, PE, CSI. In the opinion of your editor the message contained in this article is deserving of much broader coverage and worthy of full consideration by professional specification writers in all fields of construction.

ARE YOU A PRO?

Dear Spec Writer:

When was the last time your boss, or your client, gave you a verbal pat on the back by saying "Fine Specification", "Real Professional Job", or approved equal words? Was it recently, a long time ago, or never?

There is a marked difference between the creative work of a true professional specification writer and the mere assembly of borrowed words and phrases of a pseudo-specification writer. This difference is apparent to all of your associates in the construction industry; Architects, Engineers, Contractors, and Material Suppliers. If you aspire to be recognized as a

professional, and if you want your profession to be held in high esteem in the construction industry, you must earn this distinction, individually and collectively. Your reputa-tion is made by the book that you write and how you use the book after it has been written, and in no other way.

It seems almost ridiculous to have to say it, but a specification writer must know his business thoroughly. Sad to say, this is not the case with all writers. Each specification that you write should be better than the last one you wrote. This means continuous study, every day and every year, as long as you continue to write specifications. You can't rest on the knowledge that you already have. Don't fall into the practice of mechanically copying something that you have written be-fore, or something that someone else has written, with little or no thought on your part. Work at learning, at keeping up with chang-ing technology of the industry; otherwise, you will become obsolete.

Specification writing is a highly specialized field of endeavor. Like any other specialization, it soon becomes known to all if you, the writer are not an expert in your

To become an expert, you must know construction materials; the old materials, the new materials, and the changes that evolve in all materials. This knowledge of materials must be comprehensive and

complete, not superficial. You must understand why materials perform and react in the manner that they do. This is a large order, of course, but a necessary one, and not an impossible one — if you work at learning. If you haven't been keeping up to date, the task is even greater, and you must work even harder to keep from falling further behind.

In many ways, learning about materials is one of the easier tasks for a specification writer. All of the information is available, if you want to make the effort and take the time to find it and study it. Read manufacturer's literature thoroughly, noting what is not said as well as what is said. Do not make interpretations of, or assumptions in, what the literature states. Do evaluate a material, and its recommended use, in the light of your own knowledge and experience, and against supposedly similar materials of competing manufacturers. For any materials, make certain that you know: the basic composition, ingredients, or nature of the material; the conditions under which the material may be used, and should not be used; the performance that can be reasonably expected from the material when properly used; the influence of the material on adjacent construction and on the entire project; and the relative cost of the material.

It is not enough just to know about the materials themselves. You

(Continued on page 6)

ARE YOU A PRO?

(Continued from page 5....)

must know how the materials are assembled and installed, even better than the workman in the field whose job it is. If you are at all unsure of how any material should be installed, find out — at once. Read the installation manuals, consult with field supervisors and sales representatives, and best of all, get out to the job and watch the workmen. Compare the workman's methods and efforts with the results that he obtains, and then make your own evaluations. Revise your requirements to get the results you want. Whether or not you include detailed workmanship or installation requirements in your specifications, you can't write a clear and logical specification if you don't know how the field work is done.

Even though you, the specification writer, can become an expert on materials and their installation, you must be able to convey this information to others. There are only two methods of communication in the construction industry, drawings, and the written word. You are responsible for the written word, and for making certain that the written word compliments the drawings to make the communication complete. When you write specifications, state the requirements simply and concisely, then quit. Lengthy discourses, repetitions and recapitulations are not necessary, not even helpful, and sometimes can be confusing. Use correct grammar in your writing, but avoid complexity and pomposity. Choose a style of writing that lends itself to ease of understanding and readability. Use words that can be understood by all of your potential readers. Use words that have

CORRECTIONS to MEMBERS ROSTER:

We attempt to print accurate rosters, but the sad fact is they quickly become obsolete...almost before they are released. This is true of the membership roster printed by the Institute and released in the January issue of the "Specifier"; and in our revised San Francisco Chapter Roster issued with the February issue of "Specifics". One of the reasons for this state of affairs is the lag in communications between the office of the Institute and us. Hence, the Roster published by the Institute does not reflect the new members covered by applications in transit; and our listing may contain names that have been dropped by the Institute for non-payment of dues, or recent transfers to other areas.

Please <u>delete</u> the following names from your S. F. Membership Roster (dropped by the Institute):

PROFESSIONAL MEMBERS:

Carl U. Collins

Donald D. Lewis

INDUSTRY MEMBERS:

Walter Ross Drew Dexter Honens Jack Eugene Park Armin Hugh Williams

Please Note: The names of the following Professional Members, shown at the bottom of Roster page R-3 were not listed in proper sequence because one was a brand new member, with application in-transit to the Institute, and the other pending Board approval:

David S. Fagerstrom

Charles W. Griffith

There are two sides to every story. Rumor provides several more!

There are three ways to do anything...the right way, the wrong way, and my way...which combines the worst of the two other ways.

one meaning only. Spell the words correctly. Learn the rules of punctuation. You will find all of this, and much more, in your C.S.I. "Manual of Practice". Read and reread the Manual until you understand how to communicate.

The specification writer may not be the person to choose all of the various materials to be used in a project. However, he is responsible for specifying all of the materials in such a manner that they will provide the performance expected. If a material can't provide the desired performance, say so, loud and clear. Never forget that you are the materials expert. Do not write anything that is against your better judgement just because someone wants you to, even though this may be the easy way out, at times. When your book of specifications has been printed, and the furor of getting the project done on time has subsided, you will find that you, the writer, will be held responsible for everything that is in that book. This is how things should be. To be a professional, you will be expected, and even required, to accept the responsibility all-by-yourself for the sufficiency and correctness of the specifications that you write.

In the course of your work, you are going to make some mistakes. When you are in error, admit it. Never try to bluff your way out, you will only be getting in deeper. Never try to shift the responsibility for the error onto someone else, you will find everyone "ducking". Face up to your mistakes and you will find there is an honest solution to all problems.

On the other hand, there are going to be times when you will be right in your decisions, but you will be asked to alter or to modify these decisions. This is the time to stand firm, the time to be resolute, not the time to waive. Some call this "integrity", a quality that you must have to be a professional.

When you write specifications, include only those requirements which you will enforce, and, by all means, do all in your power to enforce those requirements. The well known phrase "Say what you mean; Mean what you say" certainly holds true for the specification writer. Once that you start to lower your standards, the tidal wave of substitutions will engulf you. Bear in mind that, in the majority of cases, a request for a substitution is made for the benefit of someone other than your client. The criteria for the evaluation of substitutions starts with the question "How will this substitution benefit my client?" The answer to this question governs your

next action. If you refer to the specifications of some technical society or of the government, the least that you can do is to have read the specification to which you make reference. Better yet, have a copy of all reference specifications that you use in your office. You can't enforce a specification unless that you know what the specification requires.

A book of specifications that includes only materials and materials installation requirements isn't complete. The book needs what I call the "preamble", ie: the instructions, proposal forms, contract conditions and allied information telling how, when, under what conditions, and for what compensation the work will be done. A portion of this work constitutes the practice of law, and, unless you are a lawyer, had better be in conjunction with your client's attorney. Other portions such as insurance requirements, methods of payment, and temporary facilities can become quite complicated, and may need special study on your part. Writing the "preamble" of the specifications may not be as interesting to you as writing about the materials to be used in the project, but do not slight the "preamble" portion. There is a good percentage of the cost of each project controlled by the requirements of the "preamble".

You, and I, and all specification writers, will find that, as our ability increases, as our willingness to assume responsibility increases, and as our reputation for integrity, honesty and fairness increases, we will gain the respect that we desire from all of our associates in the construction industry. We can then quit talking about professionalism because we will be professionals.

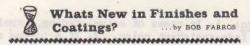
Sincerely yours,

O. Robert Bellucci, PE, CSI

BUILDING PRODUCTS FAIR... April 16th

Last call for Exhibitors! Booth space in the Fern Court, Western Merchandise Mart, at 9th & Market Streets, San Francisco - has been sold out. A few unsold booths remain in the annex. Chairman Wes Page asks your help in getting them sold in ample time for our April 16 show. How about it? Suggestions will be appreciated.

.6.



"PAINT FAILURES" - Part I

The reasons for an unsatisfactory paint job can be many...the wrong paint, cheap paint, faulty application, or even poorly constructed buildings. Aside from these factors, here are some of the most common problems, their systems, probable causes, check points and suggested solutions:

I. Failure to Dry Fast or Even Dry At All

Symptom: A tacky condition beyond the normal drying time.

Causes: 1. Grease, wax or wax polish on the surface. 2. Improperly cleaned surface. 3. Poor ventilation. 4. Extreme cold weather. 5. Extreme heat and humidity. 6. Moisture in on on the surface. 7. Improperly cleaned brushes that may have kerosene still on them. 8. An excess amount of raw Linseed Oil added to the paint. 9. Residual detergent films. 10. Excessive amount of added colorant (8 fl. oz. per gal., is usual maximum).

Check or Test: 1. Was surface preparation adequate? 2. Were all grease films, waxes and wax polishes removed? What were the temperature and humidity conditions during time of application and the setting time? 3. If surface was cleaned with strong detergent - was surface thoroughly water rinsed and completely dry? 4. How much oil, if any, was added to the paint? 5. Check the paint bucket used - if drippings dried on the side of the can and not on the painted surface - it points immediately to some surface condition. 7. Brush some of the same material on a non-porous clean surface. To make sure the problem did not start with a dirty brush, use a fresh can of the same batch number and apply with a clean brush.

Solution: If the paint won't dry, recommend removing it and starting over. Make sure the surface is prepared properly, and use a fresh can of material and a clean brush.

II. Lack of Hiding

Cause: 1. Usually too much surface and too litle paint. 2. A two-coat job and the first coat was applied in a thin haphazard manner. 3. The surface may be too porous and the paint is "striking in", penetrating, carrying the hiding power and color with it. 4. Paint was thinned excessively. This may have been done to overcome viscosity due to the paint being cold, or the applicator may be lazy...using thinner as a substitute for elbow grease...spreading the paint over too much surface. 5. Inadequate mixing before starting the job, pigments on the bottom of a can won't hide anything.

6. Using a poor brush or roller that won't "lay-off" the material properly. 7. Certain very clean colors (pure red, for example) do not have 1-coat hiding power.

Check or Test: 1. Measure the sq. ft. per gal.
Check the can label for spreading rate. These
figures are usually given for smooth surfaces, so
allowances must be made for porous or rough textured surfaces such as sand finish, plaster or
concrete block, etc.

- GA

2. If the surface was porous, check to see if it was adequately primed before the finish coat was applied. 3. How much thinner was actually used, and why? 4. What was the temperature of the surface, the area where the work was done, and the paint itself? When cold paint is applied to a warm surface - the viscosity is lowered and the paint tends to run, and therefore spreads too thin and too far. 5. Insure the paint was thoroughly mixed. 6. Check the brush or roller used to make sure it was of adequate quality for the job. 7. If all else fails, demonstrate by application that it will hide when properly mixed and applied.

Solution: Apply another coat of the same material at the recommended spreading rate.

III. Sagging

Symptoms: The symptoms are in the form of sags, curtains or drapes. Sagging usually occurs on varnishes or enamels. Also found in the form of "tear drops" following roller application on flat surfaces using alkyd material.

Causes: 1. Too much paint used. 2. Material was thinned excessively. 3. Cold paint applied to a warm surface...paint should be applied at room temperature. 4. Amature brushing, especially on cabinet work or door panels. 5. Result of a glossy surface that dosen't provide sufficient tooth for the paint to adhere.

Checks or Tests: 1. Was too much paint used for the sq. footage involved? 2. Was the material thinned? How much was added, and why? 3. What was the temperature of the material and surface? 4. What experience did the painter have? 5. Did he use proper tools? 6. Was the surface dull enough to provide proper tooth? 7. Check the complaint by preparing the surface and applying the material properly.

Solution: When the film is thoroughly dried, sand all of the sags and curtains smooth and then recoat the surface properly.

IV. The Material Dries Too Fast

Symtoms: May be indicated by failure to flow out properly, failure to hold a wet edge, lapping marks showing or brush marks appearing in the material.

Causes: 1. Applying too little paint. This is just the opposite cause of sagging. 2. Brush marks can be the result of excessive brushing rather than tipping-off lightly as should be done with enamels and varnishes. 3. Improper or inadequate primer, sealer or undercoat; one that dosen't have proper hold-out or has too much suction. 4. Improper or inadequate amount of thinner added. Naptha or benzine may have been used, when the paint was formulated to hold a wet edge with low odor solvents and they altered the drying rate. 5. Working in a draft or in extreme heat. 6. Failure to work fast enough to maintain a proper wet edge.

Check or Test: 1. Was the material applied at the proper spreading rate? 2. Was the material brushed excessively? 3. Was the surface properly sealed or primed? 4. Was the proper thinner used and in the proper amount? 5. Was a strong draft or extreme heat involved? 6. Was the material applied too slowly?

(Continued on next page)

PAINT FAILURES (Continued)

Solution: 1. Brush out the material, using the same material on the same surface. Use plenty of paint and avoid excessive brushing. 2. Compare this material with a different batch on the same surface. See if they both work alike. 3. Try additional thinning to allow for the suction and to give the paint a better flow. 4. Avoid application in a draft or extreme heat.

V. Color Streaking, Blotching and Flocculation

Symptoms: Uneven color distribution on the surface or rapid separation of color or float in the can.

<u>Cause</u>: Usually inadequate mixing or overdosing of colorants which kick out of solution.

Check or Test: 1. How much colorant was added, if any? 2. What type of colorant was added? 3. How long was it mixed and by what method? 4. Apply some of the material after mixing it in the bucket. 5. Spread some paint evenly on a light colored surface with your finger and note if the color changes under rubbing. The trouble is lack of color (pigment) dispersion and needs more mixing.

Solution: 1. If it is a case of overdose of colorants, repaint the surface with the proper mixture. By this we mean one that doesn't contain more than the recommended amount of colorant per gallon.

2. If color is inadequately dispersed, mix for a longer period. Custom tinted colors require 5 minutes mixing time, and water base paints may require longer mixing than oil base paints because solvent types tend to disperse color more readily.

VI. Fading

Symptoms: 1. Premature loss of color on exterior finishes. 2. Spot fading on masonry or plaster surfaces.

Causes: 1. Strong ultraviolet rays of sun on the pigment. 2. Chalking of exterior surfaces. This is apparent fading and not real fading. 3. An alkaline surface causing what we know as a lime burn.

Check or Test: 1. If the faded area is exposed to strong rays of the sun, you can suspect ultraviolet rays. 2. Was photo-sensitive pigment added to the paint by the customer? The addition of the wrong pigment can have this effect. 3. Improper priming and sealing may cause premature chalking in some areas, which makes spots appear more faded than other areas. 4. Rub down a small area of the faded surface with water or oil on a clean rag. If the original color is restored, then the pigment didn't fade; it only appeared so. The explanation can be rather technical but the white pigment appears more opaque when it starts to chalk and the additional whiteness overpowers the color. 5. Patches on the masonry or plaster may not have cures properly before applying the finish coat, causing lime burn. 6. Is moisture getting into the surface material under the paint? 7. Did the customer tint a chalking-type, self-cleaning house paint?

March 1, Chapter Membership total - 202
Professional: 105; Transferred to other Chapters
2; Retired 4; Junior 1; and Industry 90

Solution: 1. In cases of actual fading, repaint with a fade-resistant color. 2. If a porous surface is the cause, reseal the surface before repainting. 3. If the tests show the fading is an optical illusion, have the customer scrub down the surface - just as you would do with a dirty car before waxing. 4. If moisture is getting into the substrate on masonry surfaces and releasing free lime, you have to stop the moisture at the source.

To be continued next month. The following paint failures will be covered: Mold & Mildew; Blistering; Flaking, Cracking & Scaling; Peeling; Orange-Peeling, Alligatoring & Wrinkling; Lack of Sheen; Poor Color Match; Staining; Odor Complaints and Poor Flow, Ropiness, Brush Marks/roller Stipple.

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...from the INSTITUTE...

We can expect some delay in the publication of new technical documents due to recent changes in personnel at the Institute office. Technical Director Ted Duke resigned to accept another position, and his assistant Larry Brown also obtained a new employer.

Replacements were promptly employed by our Institute. Tom Hollenbeck, formerly Technical Director for AIA will assume a similar role for CSI. Larry Adams has been hired as Asst. Director to complete our staff. Both are able men, we welcome them to their new responsibilities and opportunities. While both men are well grounded in the fundamentals, some delay must be expected as they proceed to work their way thru the stack of documents in various stages of revision.

NOW HEAR THIS

HENRY C. COLLINS, AIA, CSI

The Board has accepted the resignation of one of our elder statesmen, Henry C. Collins of San Mateo, with deep regret. A resolution was passed commending Henry for his long and effective leadership and service to the Chapter, as a charter member, past president, director and chairman of several key committees during many years. He is slated to join the ranks of our 3 retired members. In this role he will continue to be one of us.

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Monthly

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